



The Greater Middle East



**New Age
Military**



Operation

Downfall

Jointness Defined



**Somalia:
Lessons Unlearned**



Theater Missile Defense



95
Autumn

Report Documentation Page

*Form Approved
OMB No. 0704-0188*

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE 1995	2. REPORT TYPE	3. DATES COVERED 00-00-1995 to 00-00-1995		
4. TITLE AND SUBTITLE Joint Force Quarterly. Number 9, Autumn 1995		5a. CONTRACT NUMBER		
		5b. GRANT NUMBER		
		5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)		5d. PROJECT NUMBER		
		5e. TASK NUMBER		
		5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) National Defense University,260 Fifth Avenue (Building 64, Room 2504),Fort Lesley J. McNair,Washington,DC,20319		8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)		
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited				
13. SUPPLEMENTARY NOTES				
14. ABSTRACT				
15. SUBJECT TERMS				
16. SECURITY CLASSIFICATION OF:		17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 136	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified			



A Word from the Chairman

It has been said that the deserts of the Middle East are where hopes and dreams go to wither and die. It is a warning worth recalling. Enough skeletons of fallen empires and forgotten cities lie buried in the sands to confirm the wisdom of that caution. In our own day we have seen hopes and dreams languish there, which demonstrates anew that the warning has not lost its gravity.

Just six years ago this region was the most dangerous place on earth. It was here that the United States faced the greatest odds of going to war with the Soviet Union. A clash of interests and a chronically unstable political culture made the chance of miscalculation frightening. As well, the conflicts that have erupted during every decade since Israel's founding—including one occasion that took us to the brink of nuclear confrontation—seemed destined to continue far into the future.

All that has changed. The end of the Cold War was one reason for the difference, although that event was not the cause of regional problems. Far from it. But neither did it heal any rifts. Instead, bipolar competition

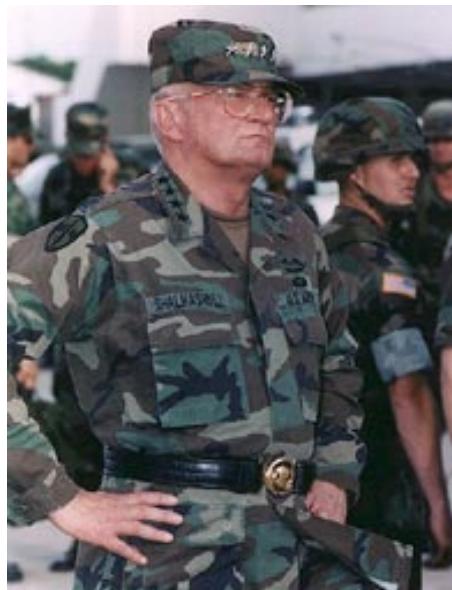
worked its way between the cracks of shifting hatreds, alliances, and ambitions that grew from a tempestuous past. It was mortar between the

bricks, one volatile canvas painted over another. Then, suddenly, the background on one of the canvasses was washed away.

This permitted two historic brushstrokes that have been applied since then. One was the Persian Gulf War. For the first time in forty-five years the West fought alongside Arab states against a common enemy. More amazing, that very enemy was an Arab nation. At once two great taboos were lifted. Moderate Arabs learned that America is a trustworthy and valuable ally and vice versa. And our European partners, wary of venturing into this region as U.S. allies ever since the Suez crisis of 1956, finally set the past aside.

The second brushstroke was applied when Yitzak Rabin and Yassar Arafat stood with their hands clasped on the White House lawn. For the region's future, their handshake that day carried an impact comparable to the fall of the Berlin Wall. Indeed, the Arab-Israeli confrontation tortured and mangled the region in ways that the Iron Curtain had never inflicted on Europe.

It would be tempting to suggest that all is now well. But, of course, it is not. Twice since the Persian Gulf War our forces have returned to deter Saddam Hussein from again lashing out at



DOD (Helene Stikkel)

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The cover features Apache helicopter (McDonnell Douglas); the insets (from top) include Kuwaiti honor guard (U.S. Air Force/Dave McLeod), transmitting photographs via satellite phone system (U.S. Air Force/Randy S. Mallard), Coast Guard barge picking up troops on Saipan (U.S. Coast Guard), marines raiding Somali market (U.S. Navy/Terry C. Mitchell), and USS Cape St. George firing surface-to-air missile (U.S. Navy/Johnny Wilson).

The front inside cover displays (clockwise, from top left) Bradley fighting vehicle (U.S. Air Force/Tracy Hall); landing craft returning to USS Ashland (U.S. Navy/Alexander C. Hicks); USS Arthur W. Radford being replenished by USS Tempest off Haiti (U.S. Navy/Gregory S. Cinelli); marines providing cover in Somalia (U.S. Navy/Terry C. Mitchell); and F-16 supporting NATO airstrikes in Bosnia (U.S. Air Force/Debbie Hernandez).

The table of contents includes photographs (from top left) of soldiers securing building in Haiti (Combat Camera Imagery/Val Gempis), Patriot missile batteries (DOD), and F-16, FA/18, and A-10 flying over Northern Italy (Combat Camera Imagery/Jamie Bowman).

The back inside cover captures Coast Guard patrol boat Adak with USS Wisconsin off Sandy Hook (U.S. Coast Guard/Robin Rossler).

The back cover reproduces a work of art from the Mexican War entitled Hill Omatuzzo by James Walker (U.S. Army Center of Military History).

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Joint Force Quarterly

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JFQ is published for the Chairman of the Joint Chiefs of Staff by the Institute for National Strategic Studies, National Defense University, to promote understanding of the integrated employment of land, sea, air, space, and special operations forces. The journal focuses on joint doctrine, coalition warfare, contingency planning, combat operations conducted by the unified commands, and joint force development.

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The editors invite articles and other contributions on joint warfighting, interservice issues that support jointness, and topics of common interest to the Armed Forces (see page 9 for details). Please direct all editorial communications to:

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This publication has been approved by the Secretary of Defense.

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his neighbors. For nearly four years we have patrolled northern Iraq to prevent the slaughter of the Kurds. Tehran's mosques still resonate with sermons by angry mullahs who spew hatred against America and exhort their followers to export a revolution of dubious benefit that has impoverished and isolated Iran. It was adherents of this faith who planted a bomb in the World Trade Center. With regard to the Middle East peace process, while it has come far there is still a

**hopes and dreams
now have a better
chance of surviving
in the Middle East**

long road ahead and, absent American power, it is unlikely that it will remain on the right path.

Yet compared to a few years ago, hopes and dreams now have a better chance of surviving in the greater Middle East. We have a vital stake in those hopes and dreams. We depend on the oil that lies beneath the sands. Without it, America as well as the international economy would suffer. We also have strong and invaluable regional allies, from freedom loving and courageous Israelis to wise and noble Egyptians without whom peace would still be an empty dream. Indeed, one great benefit of the last few years has been the growth of American-Arab friendship made possible by vast changes in the region's strategic environment.

The articles on the greater Middle East which appear in this issue of *JFQ* explore some of the challenges that remain. With the end of the Cold War, American power has become interlaced with the future of the region as never before. U.S. leadership, vision, and strength are important to meeting larger challenges and obstacles. As we survey the opportunities before us, we should remember that only a short time ago the threat of Armageddon loomed in this area. We now have a chance to make sure that this threat never arises again.

JOHN M. SHALIKASHVILI
Chairman
of the Joint Chiefs of Staff

Joint Force Quarterly

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FOCUS ON THE Middle East

By HANS BINNENDIJK

Events in the first half of this decade have significantly strengthened America's strategic hand in the Middle East, but several long-term trends threaten to undermine this progress and once again make the region dangerous to Western interests. The type and extent of future U.S. military engagement in the greater Middle East could be determined by the direction of these trends. It is for this reason that we focus on the region in the *JFQ* Forum in this issue of the journal.

The collapse of the Soviet Union and the withering of its bilateral security ties abroad have severely reduced Moscow's ability to affect regional events and have modified the orientation of countries such as Syria and Yemen. Without this competition the United States emerged as the principal external actor in the region. This advantage was reinforced by the outcome of the Persian Gulf War in 1991 and our continuing effort in defense of the Gulf Cooperation Council (GCC) states. Washington invested its diplomatic advantages wisely and helped broker peace agreements between Israel and the Palestine Liberation Organization and between Israel and Jordan. Peace efforts continue with Syria. The American role has seldom been as dominant.

But there is heightened concern in the Middle East over a combination of internal economic, social, and political problems which eclipse traditional security concerns. As these problems have grown, radical groups have used religion as a political weapon to destabilize pro-Western states and to spread terror not only to Cairo and Algiers but to Paris and New York. At the same time, states in the region continue to pursue weapons of mass destruction to offset conventional military weakness, with delivery

systems that can strike U.S. forces abroad. Should Islamic, anti-Western regimes take power, or Iran and Iraq have a free hand, U.S. interests would suffer a serious setback.

These factors have altered the region's geographic parameters. The narrow Cold War perspective which viewed the Middle East as limited to the Levant and the Persian Gulf is obsolete. The emerging concept of a "greater" Middle East encompasses the territory between Turkey in the north and the Horn of Africa in the south, and between Morocco to the west and Pakistan to the east, and recognizes the strategic impact of events in areas adjacent to the traditional boundaries of the Middle East. Some even include Central Asia as part of the region.

Despite positive developments and dangerous prospects, core U.S. strategic interests in the area remain essentially what they were during the Cold War. Protecting access to Persian Gulf oil, maintaining peace between Israel and its neighbors, and limiting radical political movements remain vital U.S. interests. What changed significantly is the political context of these challenges. While a considerable consensus remains between American and regional views regarding security threats, the shift towards domestic priorities by key governments could begin to undermine this consensus.

The United States protects its vital interests in the Gulf with a diplomatic policy of dual containment, backed up by the U.S. Central Command. This policy, which labels both Iran and Iraq as hostile to Western interests, has thus far effectively isolated the region's most immediate security threats. There are recent indications that the regime of Saddam Hussein is under intense pressure. But dual containment is a unilateral initiative with only limited support from Europe and Japan. Should sanctions against Iraq be eased by the United Nations, or should Russia supply Iran with fissile material, the dual containment policy could break down and our Gulf allies would be increasingly threatened. Dual containment also does not address the potential for instability that exists among the states of the Gulf Cooperation Council. The U.S. military presence which provides them with external protection would be of little avail against internal upheaval.

In the event that it must again respond to a challenge from Iraq or another renegade nation, CENTCOM has taken significant steps with the cooperation of GCC states to bolster its theater military posture and to reduce its long lead-time for transporting equipment and weapons to the region. As *Vigilant Warrior* illustrated in October 1994, our ability to mobilize expeditionary forces

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and deploy them has improved rapidly and dramatically. Nevertheless, with U.S. force reductions in Europe and elsewhere, a repeat of the massive Desert Storm buildup would significantly strain the U.S. force structure. In addition, the continued military enforcement of the Iraqi cease fire through Operations Southern Watch and Provide Comfort II constantly stress our forces. To reduce this tension and enhance the durability of these missions, more efficient means to accomplish these tasks may need to be devised.

The second vital American interest in the region—maintaining the Arab-Israeli peace—is also protected by both diplomacy and military engagement. The successes in the Middle East peace process will probably be an important diplomatic legacy of the Clinton administration. But the process is not complete and existing successes are under attack. The recent assassination of Israeli Prime Minister Yitzhak Rabin by an Israeli extremist robs the peace process of its most important leader. We can only hope that the outrage it has engendered throughout the world will stimulate rather than retard the peace process. Much may now depend upon whether the position of moderates within Israel can be strengthened and whether Syrian President Hafez al-Assad is willing to compromise over the Golan.

In the Middle East peace process it is success that brings U.S. military engagement. The United States continues to deploy two battalions as peace monitors in the Sinai. Peace between Israel and Syria will probably mean deployment of additional peacekeepers to the Golan Heights. Despite criticism of such a deployment, American peacekeepers on the Golan would likely be quite secure. If a deployment is required, the United States will have an opportunity to consolidate the Sinai and Golan operations and provide a more cost effective monitoring force.

While there are prospects for success in U.S. Persian Gulf policy and the peace process, the most alarming development in the greater Middle East is the growth of Islamic extremism in Algeria, Sudan, Egypt, and elsewhere. In its most extreme form resurgent Islam is an ideological, xenophobic, populist movement that seeks to overthrow moderate regimes, endorses anti-Western strategies, and advocates the supremacy of Islamic parties. Extremists represent a special challenge to governments by threatening their legitimacy on religious as well as political grounds.

While militant Moslems may have strong religious beliefs, many deliberately use Islam to further political agendas. With the failures of Marxism and pan-Arab ideologies, many radicals view

Islam as the vehicle with which to contest government policies and gain control of governing institutions. While some connections and common interests exist among these radical groups, they do not constitute a monolithic movement. Nor are they representative of Islam. The United States and its Western allies can work with the great majority of Moslems, who do not support a radical anti-Western agenda. In any case, it would be both fallacious and counterproductive for America or its treaty partners to develop policies which could be perceived as anti-Islamic.

Given rising economic, social, and political difficulties confronting friendly governments in the Middle East there is little the United States can do militarily to ameliorate the present situation. We must continue to support friendly governments who are in direct conflict with extremists while urging them to deal with underlying economic, social, and political issues. We must recognize the potential costs to our long-term security interests if the extremists succeed, and we must also begin to develop contingency plans. For example, we might well be called on by France to help evacuate people should extremists take over in Algeria. We could also find ourselves caught in the middle of internal unrest in Egypt or the Gulf.

These challenges are all addressed in greater detail by authors of the articles in *JFQ Forum*. They take a broad, long-term view of the emerging threats that Western governments as well as joint force commanders and planners may have to face in the region.

JFQ

Letters . . .

OVERSEAS PRESENCE

To the Editor—In an article that appeared in the Summer 1995 issue of *JFQ*, David Yost stated that to address the question of U.S. overseas presence, we must go back to first principles. Yost's principles turn out to be pillars of liberal internationalist theory. Peace is indivisible and threats to the world order are everywhere threats to our security. In other words, occasional alligators of discontent, extremism, and aggression can be best defeated by draining the swamp.

But a potent argument can be made that his principles vanished with the Cold War. After all, it is astonishing to learn that the demise of the Soviet Union as a clear and present danger has apparently changed nothing vis-à-vis national security. In one of the most unthreatening periods in our Nation's history we are being encouraged to wage a costly and expansive crusade through a strategy of engagement.

Yost's first principles rest on two assumptions of the Cold War that are questionable today. The first is that resources are unlimited and provide infinite means to shape international security. This takes little account of the debt crisis, a falling share of world GNP, and rich democratic, free-market states across Europe and Asia. The second is that our allies and clients will acquiesce in our actions overseas. After all, who wouldn't want to follow our lead? Exceptionalism is key to Wilsonian internationalism, but as Abba Eban observed: "The truth is that nobody outside of America has ever taken the theory of American exceptionalism very seriously."

The arrogance of liberal internationalism does not start at the water's edge; it also applies to Americans in an attempt to factor them out of the foreign policy equation. Yost rightly points out that polls reveal a mood of prudence and caution that reflects dire in-your-face troubles at home and lack of a tangible threat abroad. Like a committed internationalist, however, he brushes aside these things by refusing to factor constraints into his prescription for engagement. Leading the world may ennoble foreign policy elites, but those who must bear the cost of that still have to deal with the more mundane problems of domestic renewal. Given the propensity of U.S. foreign policy adventures to lose public support and collapse at the first sign of double-digit casualties, the tolerance of the Nation should command greater attention from policy elites instead of getting short shrift as parochial or irrelevant. Public willingness to make sacrifices is an accurate barometer of the varying importance of U.S. interests.

The coupling of Yost's two assumptions leads to a means-ends gap that undermines America's credibility overseas. Resources are finite, and it is not unpatriotic to say so. We must abandon the paradigm that every crisis is a zero sum game. U.S. security requires taking a selective look at military responses and preserving our assets for crises that merit attention because they threaten national interests. Engagement and leadership are means to an end, not ends in themselves, and when taken in Yost's context as policy guidance they could lead to squandering valuable resources in places such as Somalia and Bosnia. In an age of shrinking budgets and crippling debt, we can take important stands on security issues without becoming the one and only world policeman.

To his credit, Yost does not pretend, as others do, that the myriad threats of a fragmenting, multipolar world actually threaten America in the same way as the Soviets did. Instead, his most compelling rationale for engagement lies in supervising our allies who apparently cannot be trusted with nuclear weapons or the strategic capabilities of force projection. So we maintain the arsenal of democracy to keep our major trading partners out of the security business—which enables them to profit enormously from our neurotic largesse—while we struggle on in the superpower role. As Ronald Steel has written, "They concentrate on productivity, market penetration, wealth, and innovation: the kind of power that matters most in today's world. In this competition we are—with our chronic deficits, weak currency, massive borrowing, and immense debt—a very strange kind of superpower."

Can we only be secure by ensuring, at great cost, that the rest of the world is secure first? Perhaps, as some suggest, this is an overreaction to having responded late for two world wars in this century. Internationalism holds that there will be other wars unless America remains "at the center of international security management efforts." This smacks of self-fulfilling prophecy and, more cynically, of a rationale for an establishment grown rich on global gendarmerie.

The underlying question suggested by Yost's first principles is whether the end of the Cold War engendered new first principles. These might dictate that peace is divisible, that wars can and always will occur, and that many will not threaten our interests. They would need to be addressed, but not always by a significant military campaign. New principles would maintain that conflicts are best solved from the inside-out: at local or regional levels. Such solutions are sustainable, and achieving them would allow the Nation to keep its powder dry for conflicts that really threaten the global balance of power and vital interests.

Basing an analysis on a theory which we do not have the resources or will to support saps the pertinence of the argument. Nobody is suggesting that we turn our backs on the rest of the world. It is a matter of intellectual approach, and defense analysts must free themselves from Cold War clichés. In the past we could not afford to question if we should be there. But today the question has to be asked, even if it is continually rejected by some on its own merits.

—John Hillen
Defense Policy Analyst
The Heritage Foundation

JOINT PSYOP

To the Editor—An error introduced into the published version of my article on "PSYOP and the Warfighting CINC" in your last issue (*JFQ*, Summer 1995) requires clarification. Command and control for psychological operations (PSYOP) forces differs from that for other special operations forces (SOF). The broad range and tactical levels, with the requirement to be fully integrated with interagency activities (both overt and covert), as well as with conventional forces, command and control warfare operations, and information warfare, mandate that PSYOP command and control structures and relationships be separate and distinct from those of other SOF. While PSYOP fully supports the activities of other SOF, its primary emphasis is to bolster the theater CINC's overall campaign and conventional forces. Thus its focus is broader than just the activities of JFSOCC or JSOTF, and its C² must allow for direct access to JFCs and full integration at all levels.

A theater SOC or JFSOCC does not normally exercise command and control over PSYOP forces other than those specifically attached to JSOTF to support other operations. Rather, day-to-day peacetime responsibility for PSYOP planning and supervision rests with J-3s, assisted by J-3 PSYOP officers and forward liaison teams from the active component PSYOP group. In a crisis, contingency, or war, CINCs will form Joint Force PSYOP Component Commands (JFPOCCs) as functional component commands (similar to ground, naval, air, and special operations component commands) to plan, coordinate, and execute theater PSYOP. CINCs designate the senior PSYOP commander as JFPOCC commander who will form a Joint PSYOP Task Force (JPOTF) to execute PSYOP. Some forces may be assigned or attached to component commands (GCC or SOCC) as the mission dictates, but JPOTF retains overall responsibility for executing PSYOP in theater.

—COL Jeffrey B. Jones, USA
Joint Staff (J-38)

A JOINT NCO?

To the Editor—Military training and leadership depend heavily on non-commissioned officers. Yet the Chairman, unlike service chiefs and most CINCs, lacks the counsel of a senior NCO. This seems odd since senior NCOs perform three distinct functions to support the chain of command. First, they assist in decisionmaking and enforcing standards during execution. Goldwater-Nichols served as the impetus for thinking about what it means to fight jointly. Participation by NCOs in joint decisions and execution should be consistent up and down the chain. Second, NCOs direct and monitor training that, while not usually joint at the individual and small unit levels, definitely affects joint exercises. Their experience could enhance efforts by CJCS to develop meaningful and challenging training. Third, they enhance communication by explaining policy to enlisted men and women and gleaning feedback on morale, welfare, quality of life, and training. This function is no less important from a joint perspective.

A senior NCO seems appropriate given the Chairman's role as communicator. Title 10 lists four CJCS functions performed for CINCs: confer with and obtain information on requirements, evaluate and integrate such information, advise and make recommendations on the requirements of combatant commands, and communicate those requirements to other DOD elements.

National military strategy cites five force building foundations including quality people and states that retaining good people involves not only matters of pay and benefits, but ensuring that "our operating tempo and planned deployments are kept within reasonable bounds." These words speak to the heart of what NCOs do: they enlighten the leadership by paying attention. Indeed, paying attention means to listen, question, monitor, reassure, ensure (the NCO way of enforcing), and report back to the boss. These communications basics are key to the success of joint exercises and operations.

Soldiers, sailors, marines, and airmen should be able to look to the NCO chain and see that it continues to the top of the Armed Forces. They should know that CJCS gets advice and counsel from one of their own. Enlisted personnel should hear the latest joint policies and decisions from an NCO. These are more matters of substance than symbolism; they are real elements of both joint and service culture, considerations that the military must address for mission success.

A senior enlisted advisor to the Chairman could uniquely benefit the entire enlisted force by reducing friction at the seams of joint training and operations. Unlike his opposite numbers in the services, he would only focus on issues relevant to jointness. When an interservice conflict that affected

the enlisted force arose, he could help senior advisors at unified commands find common solutions. This would be valuable for every command. In ad hoc organizations such as JTFs he could establish an acceptable set of standards.

Since nearly 80 percent of the Armed Forces are enlisted, it seems fitting that they have one of their own at the top of the joint team.

—SGM William P. Traeger, USA
Senior Enlisted Advisor
Joint Special Operations Forces
Institute

HUBRIS . . . FROM THE SEA

To the Editor—When General Merrill McPeak, former Air Force Chief of Staff, stated that his service was willing to give up major missions to the Army and naval air arms except for long-range and strategic bombing, he basically admitted that the Nation does not need an Air Force. Then why not simply expand the other services to assume the missions of the Air Force? After all, the Air Force was a

creature of the Cold War, which is over now. As outlined by McPeak, the Army, Navy, and Marine Corps would continue present missions, even though he envisioned mission expansions for each service. The Navy could assume long-range bombing, which he suggested is the only true remaining Air Force mission. The Navy has the power to control the air over ocean and coastal areas and consequently can strike anywhere. All three main branches of the operational Navy have long-range strike potential already.

Submarines clearly possess that potential as the Navy's strategic arm. This most viable leg of the nuclear triad continues to deploy submarine-launched nuclear missiles. Strategic Command is already headed by a naval officer. It would be a relatively small step to turn it over to the Navy. Furthermore, because strategic (nuclear) forces have a much smaller profile than in the Cold War, perhaps it is time to do away with B-1Bs and B-52s and their outdated strategic strike capability. The rationale for a nuclear triad has passed away as should the triad itself. All long-range strategic bombing

RMA Essay Contest WINNERS

The winners of the first annual *Joint Force Quarterly* Essay Contest on the Revolution in Military Affairs sponsored by the National Defense University Foundation, Inc., are as follows:

FIRST PRIZE

"War in the Information Age"

by ENSIGN THOMAS G. MAHNKEN, USNR

SECOND PRIZE

"Acoustic Technology on the Twenty-First Century Battlefield"

by LIEUTENANT COLONEL MARVIN G. METCALF, ARNG

THIRD PRIZE

"Joint Warfare and the Ultimate High Ground: Implications of U.S. Military Dependence on Space"

by MAJOR JEFFREY L. CATON, USAF

Prizes of \$2,000, \$1,000, and \$500 will be presented to the first, second, and third place winners, respectively. An additional prize of \$500 will be awarded to the first place winner, ENS Mahnken, for submitting the best essay by a contestant in the rank of major/lieutenant commander or below. Winners also will receive a selection of books on various aspects of military affairs and innovation. The prize winning essays and other contributions on the revolution in military affairs will appear in the next issue of the journal (Winter 1995-96).

should belong to the most secure of the strategic forces, the Navy submarine service.

Tomahawk cruise missiles give surface vessels a long-range strike capability. They proved their worth in Desert Storm and since. The Navy currently has plans for more Tomahawk capable ships and more capable missiles. This offers the ability, without allies, to strike anywhere within a thousand miles of any coast, that is, in every politically important region of the world.

Most important to long-range and strategic bombing is naval air. Navy and Marine aircraft did the same job as Air Force planes during Desert Storm. One problem—a lack of coordination in long-range strike war—can be solved if the Air Force is phased out and the Navy is given all long-range bombing missions. But not only is the Navy able to fill much of the long-range and strategic bombing mission; for fifty years it has been built around the strength of airpower projection, so much so that today 48 percent of naval officers are flyers.

Eliminating the Air Force would simplify the military establishment and cut the size of the defense budget. Instead of three military departments there would be two. The redundancy of the Air Force—in transport, nuclear weapons, tactical air, long-range strike, et al.—could be scraped while that small portion of its capabilities that is not a duplication could be given to the Army and Navy.

The Navy is built around airpower projection. The recurring strategic question "where are the carriers?" which has been asked by virtually all post-war Presidents recognizes this fact. Since the Navy has become the Nation's on-call air arm, why not eliminate the Air Force and give part of its sole remaining mission to the Navy?

—LT S. Pratt Hokanson, USN
History Department
U.S. Naval Academy

CORRIGENDA

In the article entitled "Atlantic Command's Joint Training Program" by Clarence Todd Morgan which appeared in issue 8 (Summer 1995), the following particulars shown here in italics stand as corrections: (1) all combatant CINCs have full authority and responsibility *under Title 10, U.S.C., chapter 6, section 164*, to conduct joint training; (2) the *Defense Planning Guidance (DPG)* provides detailed training guidance to CINCs; and (3) *J-71 coordinates JTP scheduling, monitors participation of ACOM forces in CJCS-directed NATO and bilateral exercises, and documents and reports or corrects deficiencies in exercises and operations.*

JFQ

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Joint Force Quarterly
ATTN: NDU-NSS-JFQ
Washington, D.C. 20319-6000

JFQ



U.S. Marine Corps (Timothy E. LeMaster)

HUMAN RIGHTS AND THE Commander

By BARRY R. McCAFFREY

The Armed Forces must respect human rights, not only on legal and ethical grounds, but also for practical reasons. Consequently, U.S. Southern Command seeks to imbue an awareness of the paramount importance of respecting and protecting human rights among U.S. military units and service members deploying to Central and South America under its aegis.

Those rights which every soldier, sailor, marine, and airman must respect are affirmed in common law, the Declaration of the U.N. General Assembly of 1948, and the Charter of the Organization of American States. Indeed, the governments of all states in the Americas—north, central, and south—have proclaimed their support of the following principles:

- Each individual has fundamental rights without distinction as to race, nationality, creed, or sex.
- The state shall respect the rights of the individual and the principles of universal morality.
- Social justice and social security are the bases for lasting peace.

Indeed, there is general agreement that our peoples have fundamental rights—rights that do not accrue from political or other forms of power but that spring from the nature of man.

Human Rights and Democracy

President Bill Clinton, whose values reflect absolute respect for the individual, offered his view on human rights before the U.N. General Assembly in September 1993:

Democracy is rooted in compromise, not conquest. It rewards tolerance, not hatred. Democracies rarely wage war on one another. They make reliable partners in trade, in diplomacy, and in the stewardship of our global environment. And democracies, with the rule of law and respect for political, religious, and cultural minorities, are more responsive to their own people and to the protection of human rights.

President Clinton's message was that "This is our motivation, this is what we stand for." Democracies, because of the consensual nature of politics and civil society, respect the fundamental rights of individuals. As Assistant Secretary of

State for Human Rights and Humanitarian Affairs John Shattuck said in August 1993:

Human rights, democracy, and the rule of law are not the same. But they are complementary and mutually reinforcing. Fundamental rights are best guaranteed by basic institutions of democracy: a free press; an independent judiciary; a vibrant civil society; freely contested, transparent, and meaningful elections. Democracy—the rule of, by, and for the people—is only possible in a political and social order that fully respects the rights of each and every man, woman, and child in society. Governments that do not respect the rule of law are by definition lawless.

The most useful point here is that there is a linkage between human rights—this principle of the rule of law—and the fundamental values of democracy.

Sun Tzu, in discussing what laws mean to commanders, said in *The Art of War*, "Laws are regulations and institutions. Those who excel in war first cultivate their own humanity and justice and maintain their laws and institution." He stated further, "The commander stands for the virtues of wisdom, sincerity, benevolence, courage, and strictness."

In one form or another the works of every significant military thinker express these ideas of Sun Tzu. A commander's actions reflect his values. Although articulated in different terms, there seems to be universal recognition that military forces and their leaders must adhere to a higher moral code.

Facing the Past

One problem with which commanders must deal is the legacy of past actions. Each military institution has its own history. Some of it is painful and none of it will go away. A people, state, or army that cannot face the past cannot learn from it and may repeat it. Inevitably, the past blocks progress until it is confronted. That is just what our Armed Forces have tried to do.

Our most useful insights into human rights come from our history of human rights abuses. Many occurred in the small wars we fought on the frontier during the 19th century against Indian tribes. Some tragedies are more modern. The truth is that there have been incidents of human rights violations in every war in which we have fought. After all, we are dealing with imperfect people and their leaders.

The most notorious recent incident occurred at My Lai during the Vietnam War. We have learned much from that tragedy. Studying it was painful, but the Peers' report and the other investigative works that analyzed its root causes have enabled us to better protect and promote human rights.

Winning the War, Losing the Peace

Two opposites from American history furnish insights into establishing a proper command climate. General William Tecumseh Sherman observed:

We are not only fighting hostile armies, but a hostile people, and must make old and young, rich and poor, feel the hard hand of war, as well as their organized armies.

If the . . . [civilians in the South] raise a howl against my barbarity and cruelty, I will answer that war is war, and not popularity seeking. If they want peace, they and their relatives must stop the war.

In contrast, General Robert E. Lee said:

No greater disgrace can befall the army and through it our whole people than the perpetration of barbarous outrages upon the innocent and defenseless. Such proceedings not only disgrace the perpetrators and all connected with them, but are subversive of the discipline and efficiency of the army, and destructive of the ends of our movement.

We can learn much from the conduct of Sherman and Lee during the Civil War. There may not be a better contrast in treating noncombatants in American military history than that posed by these two commanders. There is no doubt that Sherman waged total war on the South ruthlessly, much as the Germans did in Russia during World War II. Of course, he also won. But was his approach, making the "old and young, rich and poor, feel the hard hand of war, as well as their organized armies" the most effective course of action?

Nearly 130 years later, Lee is still revered as a man of integrity and principle. But he lost. Why then do his lessons have value for us today? Winning a war is a reasonably easy proposition although it involves energy, courage, violence, and skill. Winning the peace is far more difficult.

Sherman's barbarity fueled a century of bitterness in the South, some of which endures to this day. Lee, on the other hand, espoused values that were not and are not a military weakness. Those values are a source of constant strength since they preclude an army dissipating its strength on wanton acts of destruction and do not create a requirement to defend gains because of enduring hostility from a civilian populace. These are values that we can appreciate by examining our past.

a commander's actions reflect his values

General Barry R. McCaffrey, USA, is commander in chief, U.S. Southern Command, and formerly served as director of strategic plans and policy (J-5), Joint Staff.

A Commander's Liability

There are two basic standards to which every commander must adhere, the *Medina* and the *Yamashita* standards. The former applies when a commander orders a crime committed or knows that a crime is about to be committed, has power to prevent it, and fails to exercise that power; the latter occurs when a commander should have known about a war crime and did nothing to stop it. (*Yamashita* assumes that a crime is part of a widespread pattern of abuse over a prolonged period. In such a scenario, a commander is presumed to have knowledge of a crime or to have abandoned his command.)

The *Medina* standard resulted from the failure by an American captain to prevent the murder of some 300 Vietnamese civilians at My Lai. It is one to which we now hold our military leaders. If a captain, colonel, or general knows of a human rights violation or a war crime and fails to take action, he will be held criminally liable. The *Yamashita* standard is named for the Japanese general who was tried and convicted following World War II for atrocities committed by troops

under his command in the Philippines. The court concluded that he failed to control the forces serving under him, particularly in Manila, and allowed them to ravage the civilian population. General Yamashita was executed for his role in those actions of brutality.

units with poor leadership will have problems with human rights

larly in Manila, and allowed them to ravage the civilian population. General Yamashita was executed for his role in those actions of brutality.

The Cause of Abuse

The Armed Forces have come to learn that institutional problems contribute to human rights abuses. If one sees the following traits, the likelihood of human rights abuse increases:

- poor leadership
- poorly trained or ill-disciplined troops
- unclear orders or missions
- tendency to dehumanize the enemy
- high frustration level among troops
- poor understanding of the complexities of unconventional war
- high casualties

We have learned that the most common factors in human rights abuse are poor leadership and poorly trained or ill-disciplined troops. Units with poor leadership will have problems with human rights. Troops behave in combat as they do in training. If poorly trained and ill disciplined they cannot fight effectively. We saw that in the Iraqi army prior to Desert Storm and also under fire. We also know that such forces do not respect the rights of noncombatants, prisoners of war, or private property.

One thing that my division command sergeant major and I would not tolerate in the months which led up to the Gulf War was labeling Iraqis as less than human. We believed that tolerating such attitudes increased the chances that Iraqi soldiers would be treated inhumanely.

We also know that high friendly casualties lead to frustration, particularly when combined with gruesome injuries. Losses inflicted by an invisible enemy are especially difficult for an army trained to fight conventional forces. In such circumstances, typical of internal wars, we know that the temptation increases for soldiers to seek retribution on enemy civilians. Strong leadership then becomes more important.

Commanders must be on the lookout for these indicators. They must ensure that leaders at squad, company, and battalion levels can recognize and deal with them before an incident occurs. This must be done through effective human rights training to preclude a breakdown in leadership.

Avoiding Abuses

How do operational commanders go about avoiding human rights abuses? The answer to that question gives rise to both some obvious and not so obvious considerations.

We had a great debate in the 24th Infantry Division before the war against Iraq broke out. Our lawyers tried to persuade me that I could not state in an annex to the division order a directive that whoever committed a war crime would be arrested and sent back out of Iraq to Saudi Arabia. But the sense that the command sergeants major, colonels, and I had to uphold was that if a soldier mistreated prisoners or civilians—he would not be given the honor of continuing to fight. We would send him to the rear disgraced and in handcuffs. I am convinced that as professionals we have to make clear that there is no acceptable level of violence against civilians. There should be zero tolerance when it comes to abusing human rights. That must be the standard for everyone.

A great challenge for those of us who serve in uniform is addressing human rights training without suggesting that respect for an enemy, its soldiers, and civilians detracts from the central objective of winning the war. How can leaders explain that such respect actually contributes to military effectiveness? How do they instruct without being paternalistic? Commanders must sort this out since they have to engage their sergeants and captains and themselves about this challenge.

The initial rules of engagement for my division were published as a 12-page document.

They were impossible to understand unless you were a field grade officer with a law degree, desk, lamp, and time to think. They had little value for sergeants, tank company commanders, or brigade operations officers; so we explained that

rules of engagement (ROE) are not tools for the lawyer but rather the commander. They had to be expressed in a

way that was helpful to a 25-year-old captain or a 20-year-old private. So we put them on cards, made them simple, and did not state the obvious. The obvious is the Ten Commandments. Less obvious is not tampering with places of worship or not firing on built-up areas without permission from your battalion commander.

ROE must be written for easy use by soldiers and their combat leaders; but they must never put our forces at risk. We cannot place our troops in danger without providing adequate means of protection.

It is not always understood that soldiers treat civilians and prisoners as they are treated themselves. So if we show our own soldiers dignity and some sense of compassion under the rule of law, they are more likely to act similarly toward the civilian population.

The opening days of combat in a conflict are the most difficult. Young men and women do not know exactly what constitutes appropriate conduct. They wait for professionals to show them through example. That in turn is how the troops will act.

In Vietnam there were normally 70 to 130 men in my company. We believed that eventually every one of us would be killed or wounded. It was rare to serve a month as a lieutenant or six months as a soldier without becoming a casualty. In such an environment of enormous violence and danger I had another concern as an infantry commander. I knew that there were a few soldiers in my company who were like caged animals awaiting release. But the vast majority, because of the influence of family, school, church, and the Constitution, were incapable of committing human rights abuses. Only the potential criminals were waiting for a chance to strike. So the challenge is how to treat a unit honorably while guarding against criminals who are inside every military in the world. Our most important responsibility is to not allow any criminals into our officer corps.

Honorable Conduct Pays

Anyone who commands forces in combat knows that respect for the dignity of the people being protected as well as the dignity of soldiers pays off. Actions such as those perpetrated by German SS units in Ukraine during World War II—slaughtering, raping, and plundering—turn the people against the invader. And the same is true in internal stability operations and unconventional warfare. Adherence to the Geneva Convention, respect for dignity, and attention to human rights benefit operational commanders.

Which position is preferable, that of a Nazi commander facing the enmity of a nation or that of an allied commander in the Gulf War facing an army that would rather quit than fight and whose soldiers eagerly seek safety in surrender? Operational commanders can control to a certain extent which position their forces adopt. If they instill a code of conduct and a sense of discipline in subordinate leaders and units, their troops will have respect for all with whom they deal. Then we will not have abusive forces.

José San Martín observed that “[a] nation does not arm its soldiers for them to commit the indecency of abusing said advantage by offending the citizens who sustain them through their sacrifices.” The military spends very little time fighting. Instead, most of its energy goes toward preparing for war. In peacetime the military interacts continuously with civilians in recruiting new soldiers, living alongside local communities, purchasing goods and services, and participating in the national debate about what constitutes proper force structure, roles, and missions.

Our fellow citizens support the military when they hold us in high esteem. They form their opinions when their sons and daughters—the Nation’s soldiers, sailors, marines, and airmen—go home and tell families and friends how well they are treated in the military. Their opinions are also influenced when they come in contact with a soldier traveling on leave, pass a convoy on the road, or visit an installation. Finally, they form opinions when they see the military in action in a conflict or peaceful mission.

Consequently, our every action in peace or war affects the prestige of our institution. We must always protect our honor. A single incident such as My Lai will cause long-term damage to the Armed Forces.

JFQ

This article is adapted from an address presented at the U.S. Army School of the Americas on August 10, 1994.



U.S. Navy (Gallagher)

Combat information center aboard
USS Kitty Hawk.

Leading the Revolution in C⁴I

By JEREMY M. BOORDA

The information revolution is a harbinger of notable changes in the objective and conduct of war. One important aspect of this revolution is information warfare—a potent command, control, communications, computer, and intelligence (C⁴I) capability with a profound influence on the way naval forces deter and if necessary fight wars. To discuss warfare in the information age, it is vital to appreciate how the Navy collects, disseminates, and uses information. Our approach is unique because it emphasizes forward presence. Simply put, one will not grasp our C⁴I vision unless the importance of naval forces being forward positioned is understood.

Forward Presence

For two hundred years the Navy and Marine Corps have provided forces to leverage events overseas. The National Command Authorities and warfighting CINCs require naval forces that are forward, ready to respond to or deter crisis, and able to transition to war. Moreover, while all the services have a role in forward presence, I am convinced that naval forces are going to be relatively more significant as Army

and Air Force units continue to return to the United States.

The Navy and Marines will, correspondingly, play prominent roles in information warfare. Forward presence requires that the naval services aggressively approach information warfare as an engaged and enabling force. Unlike other services, the Navy must imbed information warfare in the fleet and be able to conduct information warfare from the time those forces leave CONUS to the end of an extended deployment.

The Revolution in Military Affairs

We are in a revolution of no less importance than the advent of steam propulsion, carrier aviation, or nuclear submarines. The so-called revolution in military affairs has moved information and the need for information dominance to center stage in thinking about warfare. Development of advanced information and communications technologies will continue. Successful implementation of these innovations requires their integration into force structure and operational concepts.

Thus the way we organize and use technology is critical. The organizational aspects may actually be more important than the technical. The Navy will be a full partner in the revolution to leverage its investment in technology, attack vulnerabilities in enemy systems, and protect its own.

Admiral Jeremy M. Boorda, USN, is chief of naval operations and previously served as commander in chief, Allied Forces, Southern Europe.

In information warfare we are not really talking about something new. We must recognize that success on past battlefields has come from innovative ways of considering and combining new technologies, and not solely from the technological advances themselves. History is replete with examples of outnumbered forces which were victorious because they controlled vital information. Often both sides had similar technologies, but one gained an advantage by their innovative use.

For instance, the Navy applied information warfare to thwart the Japanese at Midway. So what is really new or revolutionary? It is the attempt to institutionalize—as others have done before—the use of information for tactical advantage. Using the Midway example, it was not information warfare that made the difference; it was information and pure luck—without the benefit of an overarching strategy.

Today we realize the value of systematically using information to influence operations and the fact that we have crossed the threshold into the information age. When the most critical enabler for naval expeditionary forces may be information, our tactics flow from information processing. We can only gain the advantage over an enemy by being the first to effectively use offensive and defensive information tactics as part of our warfighting arsenal; so the challenge is institutionalizing information warfare innovation and capitalizing on the opportunities available today.

the challenge is institutionalizing information warfare innovation

Enabling Force

The Navy and Marines have always provided combat credible forces, forward. Thus our information warfare weapons, command and control systems, and the associated expertise must be embedded in the force, ready to execute information warfare. Forward deployed naval forces need an in-place global C⁴I structure. For example, we have an embedded JFACC capability that gives us a structure for building joint C⁴I capability in theater. Moreover, because our posture forward allows the Navy to be in position as crises develop, information warfare will give us the ability to influence enemy decisions, prepare the battlespace before hostilities, and dictate the battle on our terms. Information based warfare, using advanced command and control with its associated high assurance connectivity, allows integration of battlefield information that in turn will increase effects from offensive firepower and maneuver of our dispersed units.

Information based warfare permits forces to fully exploit weapons technology to escalate the speed of battle. Denying an enemy's ability to communicate, going after command and control nets, and shutting down sensors will provide an upper hand on the battlefield. Also, information based warfare will afford the United States the operational flexibility to allocate forces and fires in real time and to defeat an enemy at the moment of our choosing. On the battlefield of the future, we will be unable to attain decisive victory without a comprehensive global command and control system. The foundation is a robust C⁴I architecture.

Copernicus

Recognizing information as a weapon the Navy issued the Copernicus architecture in 1990. This is an initiative to make C⁴I systems responsive to the warfighter, field them quickly, capitalize on advances in technology, and shape doctrine to reflect changes. The Copernicus architecture is the structure of how C⁴I works. It represents satellites which pass data, computers which process information, and warfighters who need information to make tactical decisions. It should be noted that it is not a system but an architecture. In other words, one cannot go out and purchase or touch Copernicus.

This architecture represents a blueprint for capturing technological change. It is a bold C⁴I paradigm shift toward a unified design and procurement strategy specifically focused on the joint warfighter. Its designers recognized that stovepipe acquisition strategies do not work; engineers are too removed from users. Instead, the goal is to combine strategies and technologies to create a consistent situational awareness where information integration is seamless and warfighters are able to access information on demand.

From the outset Copernicus was not intended to be a formal acquisition program because there was no comprehensive DOD program. The intent was to serve as the definitive architecture and unifying strategy for multi-service joint C⁴I programs. The Navy tactical command system-at-sea (NTCS-A) is a case in point. This dynamic system is part of the joint maritime command system (JMCS). It is installed on more than 200 ships, replaces a variety of less capable systems, and integrates information in one display.

Jointness

The Armed Forces made a significant step toward a truly joint C⁴I structure in 1992 when the Joint Staff followed the Navy's lead and issued

"C⁴I for the Warrior." This concept, based on Copernicus, envisioned a joint C⁴I architecture that provided timely sensor-to-shooter information direct to the warfighter. Then the Army published "Enterprise Strategy" in 1993 and the Air Force issued "Horizon" in 1994. Significant portions of those documents reflect the Copernicus effort. This architecture is more than a snapshot of the current C⁴I structure; it is a dynamic and evolving program which is flexible enough to adapt to rapid technological change.

This year the Navy will release an updated plan that will redefine Copernicus as it evolved, discuss acquisition strategies, and chart the course for the future. The emphasis for all of these initiatives will remain constant as Copernicus evolves to meet the goal of joint C⁴I for the warrior.

The Navy is the de facto C⁴I joint architect and its joint maritime command information system (JMCIS) is the backbone of the global command and control system (GCCS). The vast experience of the Navy and Marine Corps in digitizing the battlespace over the past thirty years is a model for building a comprehensive common tactical picture at sea and over land.

Vision

To realize this vision, C⁴I systems must be built under a JCS unified strategy. Copernicus provides this focus for the Navy and Marines. Our approach demands implementation of state-of-

Congress, identified Challenge Athena as one of the most innovative and successful imagery dissemination efforts. Demonstrations utilize open architecture and commercial standards to provide joint and allied interoperability.

By using the fleet as a C⁴I laboratory, operators gain valuable experience with equipment as system designers respond to customers. After a demonstration period, the advanced technology becomes a fielded operational system with trained operators to run it. The Copernicus architecture, while not in final form, is fielded and operational. It is a robust and dynamic system that provides global C⁴I in support of the national military strategy. It is part of the joint vision.

Exercises and Doctrine

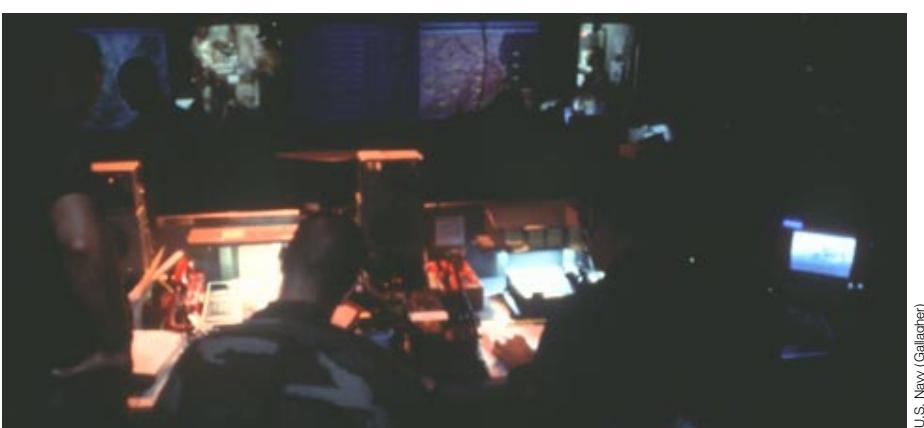
C⁴I assets are featured in a joint warfare interoperability demonstration, Kernel Blitz '95, which spans two oceans and a continent. It integrates an amphibious ready group; a geo-transformed mine countermeasures force; a simulated carrier battle group; Air Force B-52s, B-1s, and F-117s, and AWACS aircraft; and Army medevac units, with modeling and simulation to offer realistic joint training in a synthetic theater of war in a European environment.

Navy C⁴I, within the context of information warfare, cannot succeed without the doctrine to support it. To achieve this, space and electronic warfare specialists work closely with the Naval Doctrine Command to provide an operating framework and guidance for forward deployed forces. Information warfare is treated in Naval Doctrine Publication (NDP) 3, *Naval Operations*, and C⁴I in NDP 6, *Command and Control*. This comprehensive analytical approach to information warfare which combines strategy, tactics, and doctrine fully prepares the Navy/Marine Corps team for the 21st century. It makes the Navy the logical choice to lead the development of joint architecture for information and C⁴I systems.

Challenges

Implementing information warfare will be a major requirement in the near future. There are two specific problems to be tackled. First, the cost of developing software is rising exponentially even as the cost of hardware remains fairly constant. Secondly, technology is moving faster than it can be integrated into the fleet. As a result technology may become obsolete by the time a system is fielded. It is time for the Navy to basically change its information system acquisition approach. One way is modeling and simulation to test product development and to speed up the time required to field a new system.

Finally, for the Navy to maintain the lead on the information superhighway, it must have a



U.S. Navy (Gallagher)

Combat information center aboard USS *Kitty Hawk*.

the-art technology with highly trained operators. This is achieved by fielding advanced technology demonstrations like Challenge Athena hardware—which offers high volume data communications afloat—to meet fleet CINC requirements. In fact, the Deputy Assistant Secretary of Defense for Intelligence and Security, in testimony to

USS Carl Vinson
in Arabian Gulf.



U.S. Navy (Michaels)

strong foothold in space, to the extent that space is a medium for exploitation by the warfighter, not a mission or the fourth dimension of the battlefield. Space offers access to real time coverage and connectivity. The Navy has integrated space systems in every facet of its operations to improve communications, navigation, surveillance, and environmental support.

for the Navy to maintain the lead it must have a strong foothold in space

We have made impressive gains in space despite the fact that the Navy receives only 4 percent of the budget and 2 percent of the personnel allocated to military space operations.

This has been done through innovation, agility, and competition for ideas. The Navy has succeeded in space through initiatives such as the ultrahigh-frequency follow-on satellite program, a model for streamlining acquisition strategies through fixed-priced multi-year contracts, and taking advantage of commercially competitive launch capabilities. With the widely dispersed, mobile, and dynamic nature of naval warfare,

space system support is integral to strategy, doctrine, and tactics.

We have crossed a threshold and must adapt to fight and win wars in the information age. It is time to be proactive and to keep naval forces ahead of the information bow wave. Toward that end, I established the Naval Information Warfare Activity, Fleet Information Warfare Center, and Modeling and Simulation Office. Moreover, the Navy issued a military satellite communications strategy and defense information infrastructure master plan. Also, I organized a tiger team under the Chief of Naval Education and Training to get information warfare incorporated into every level of fleet and individual training. It is clear that information has become a major factor in warfare and will grow in importance. Join us in redefining how wars are fought and won.

JFQ

This article is adapted from an address presented to the Armed Forces Communications and Electronics Association in Washington, D.C., on March 23, 1995.

Fires of Kuwait.



Military Education for the New Age

U.S. Navy (S. Gozzo)



B-17s over England.

U.S. Air Force Collection, National Air and Space Museum

By ERVIN J. ROKKE

During his transition from Princeton University to the White House, Woodrow Wilson is alleged to have said that academic politics are the worst kind because the stakes are so low. As any dean with curriculum revision experience will attest, Wilson had a point. Squaring curricula with student needs at the expense of faculty interests is a complex task.

The stakes clearly have changed, however, at least in the context of professional military education (PME) at the war colleges. Not only has the post-Cold War era placed new substantive and pedagogical requirements on military educators, but new demands on the relationship between

PME institutions and the policy community as well. Adapting to this change is the basic challenge confronting the war colleges today.

The issue is straightforward: either the war colleges become agents for change within the individual services and joint arena or they become anachronisms. Whatever the nature of academic politics, the downside is irrelevancy at best and demise at worst. Five major factors contribute to this phenomenon.

Factors for Change

International Politics. Historians and political scientists hold that the international system changes when new answers emerge to three fundamental questions: Who are the major players?

What can they do to one another? What do they wish to do to one another? The unexpected end of the Cold War was only the latest watershed in the world order. One classic example is the French Revolution which spawned a new player (democratic France), a new capability (a citizen army), and new intentions (liberty, equality, and fraternity). Similar transitions occurred with the Congress of Vienna (1815), German unification (1870), Treaty of Versailles (1919), and agreements following World War II.

From the perspective of war college curricula, it is useful to examine the ongoing post-Cold War transition against the backdrop of past

changes. In each instance the results were not readily apparent. The answers to questions concerning players, capabilities, and intentions are no more likely to surface quickly or clearly today than in previous realignments of the international system.

Assessments made in the democratic atmosphere of Paris circa 1789 did not foresee an autocratic Napoleon on the horizon. Similarly, most internationalist projections made at Versailles following World War I failed to predict a global depression or a resurgent Germany.

The first requirement then for the curricula at war colleges is to ensure that students do not presume to know who their future opponents or coalition partners will be. This appreciation for uncertainty is the beginning of wisdom in the post-Cold War era. But underscoring uncertainty is not the same thing as saying that everything is up for grabs. On the contrary, it means that the war colleges must delve into what is known but is frequently neglected in the defense establishment. For example, students must understand more than their predecessors about economics, technologies, and diverse cultures to make sound judgments. This perspective brings into question several major tenets of defense policy which were prevalent in a bipolar world. Although it offers few clear-cut policy prescriptions, it is essential to appreciating the security implications of a world order in flux.

Technology. Advances in technology are hardly new phenomena. Stirrups, gunpowder, the steam engine, radio, stealth, and other innovations dramatically changed the nature of warfare.

Curricula are replete with cases of how such advances were treated by institutions and individuals wedded to more traditional approaches.¹ Recently, however, breakthroughs related to warfare have occurred with greater frequency, more substantial impact on quality versus quantity tradeoffs, and increased organizational implications.

A former director of the Defense Intelligence Agency, Lieutenant General James Clapper, has raised an excellent case of the accelerating impact of technology on quality-quantity tradeoffs.² During World War II some 9,000 bombs dropped by more than 1,500 B-17 bomber sorties were required to destroy a 6,000 square foot target. In Vietnam the destruction of a similar target took only 176 bombs delivered by 88 F-4 fighter sorties. During the Gulf War, one bomb carried by an F-117 fighter-bomber did the job. This is not to imply that a single 2,000 pound bomb can today destroy every 6,000 square foot target. Advances in guidance system technology, however, have made a qualitative improvement in weapon effectiveness. Technological advances by ground and naval forces also resulted in impressive warfighting efficiencies during Desert Storm.

Equally important for PME are the organizational, structural, and budgetary implications of accelerated technological breakthroughs. The price of improved technology is high, particularly if applied to such systems as the stealthy F-117 aircraft. Indeed, given the tradeoff between a new item of equipment representing a breakthrough in sophistication as opposed to just a better, simpler item, some defense experts argue for the latter.³ Whatever the ambiguity of quality versus quantity tradeoffs, however, the organizational impact of increasingly expensive high tech items is clear. As the cost and operational complexity of systems increase substantially, the organizational response is centralization. In the case of the evolution from photographic reconnaissance aircraft to satellites the focal point of operations and control moves from the battlefield to Washington.

Information. Perhaps no single factor has as much potential as the information explosion for changing the way in which military organizations function, both during peace and in war. The widespread adoption of information technologies in the latter part of this century has set the stage for a social transformation of historic magnitude by making unprecedented amounts of information instantaneously available in easy-to-use forms at ever-diminishing cost. The emerging information highway, which extends from earth to geosynchronous orbit, will certainly alter society, to say nothing of conflict. Worldwide 24-hour connectivity and sensors and hardware needed to support information processing are already in place. So are stand-off weapons that can be

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Lieutenant General Ervin J. Rokke, USAF, is president of the National Defense University and formerly served as assistant chief of staff for intelligence at Headquarters, U.S. Air Force.

launched from almost anywhere and strike targets with accuracy measured in fractions of yards.

To date the best thinking on innovative applications for information age technologies has been done by the staff of the Office of Net Assessment under Andrew Marshall at the Pentagon. They have recast functional areas associated with traditional service expertise into precision strike, dominating maneuver, space warfare, and information warfare. Moreover, they suggest that the potential for a revolution in military affairs (RMA) exists in a zone where these new warfare areas intersect and offer a new construct that demonstrates the military potential afforded by information. The Vice Chairman, Admiral William Owens, with similar logic, has advanced a vision of a 200 square nautical mile battlefield box about which virtually everything is known

on a near real-time basis and within which all targets can be hit using stand-off weapons.⁴

Not surprisingly, debates about whether RMA notions are fact or fiction provide grist for the mill in many PME seminars. But information age issues go far beyond procedures for waging war to the heart of military organization. Cheap microchips and breakthroughs in communications have made huge amounts of information available and created pressure for decentralization and flat organizational structures. Bluntly stated, vertical organizational structures long associated with the military, along with the centralization resulting in part from high tech and costly equipment, are not optimal for the information age. When tank, ship, and aircraft operators

can directly receive much of the information they need to fight, at least some higher headquarters will become extraneous.

Jointness/Coalition Warfare. Consistent with the Goldwater-Nichols Act, the increasingly prominent combatant CINCs have responsibility for command and control in warfare. To support

them, the services have made major improvements in collaboration and interoperability. Jointness is in. Outstanding professionals are now assigned to positions on joint staffs, and a succession of JTF exercises and deployments has proven that the Armed Forces are capable of functioning within multi-service command structures. Even service monopolies on developing requirements have been redressed by the Joint Requirements Oversight Council (JROC) overseen by the Vice Chairman.

As the services become more familiar with joint responsibilities and work more effectively together, we also are finding that the likelihood of the United States fighting alone is becoming remote. Experiences such as the Gulf War, former Yugoslavia, and other recent crises suggest that alliances and well-greased multinational command chains are insufficient if not outmoded. Ad hoc alliances and coalitions are the norm, and the United Nations is increasingly involved in humanitarian and peace operations.

Coordinating strategy and tactics to include rules of engagement as well as the distribution of intelligence to coalition partners with both varying capacities for information and differing levels of security access are tasks that war college graduates face. The problem becomes more complex as tensions arise between the centralizing tendencies of jointness and the decentralizing, multiple chain of command biases of coalition warfare.

Ecology. Perhaps less known but significant in their impact on security are environmental phenomena. While this area has received little attention in PME, it is drawing increasing emphasis worldwide. It embraces climate change, ozone depletion, deforestation, biodiversity loss, and air and water pollution. Recent examples include the 1989 conflict between Senegal and Mauritania which was sparked by a scarcity of water and arable land, and the mass migration from Rwanda which became a crisis of epic proportions because of the lack of potable water. In short, ecological developments could well affect the circumstances under which the Armed Forces are used as well as how they are used. Clearly this new challenge is relevant to PME—although it has gone largely unaddressed.

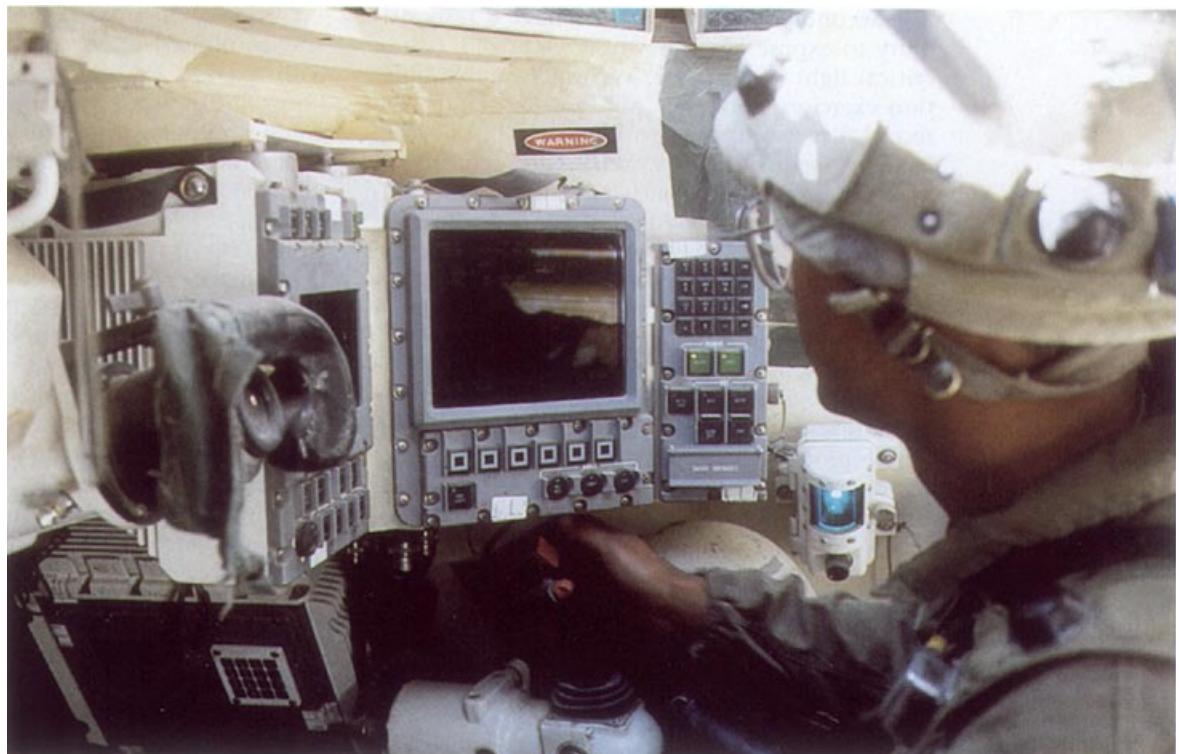
And so it is that various factors, from international politics and ecology through technology and information, are moving doctrine, organization, and operations in new and often conflicting directions. As General Wayne Downing, Commander in Chief of U.S. Special Operations Command, told students attending the School of Information Warfare and Strategy, "In the information age, the very nature of war is changing."⁵



U.S. Army (Larry Lane)

"Digital" soldier.

Inter-vehicle
information system.



U.S. Army (Larry Lane)

Imperatives for PME

The central task of war colleges is to prepare students to succeed across a broad spectrum of national security challenges. The impact of these institutions is in large part a function of how well their graduates perform. We are in the business of equipping leaders to deal with the security environment of the 21st century. The unpredictable nature of the ongoing process of change makes

this more akin to a floating craps game than an exact science. Nevertheless, it is a game in which we all must play. As the Chairman, General John Shalikashvili, observed, "The unexpected has become the routine; we need people who are comfortable in an uncertain

world."⁶ In this game, the role of war colleges is to make the odds better for graduates. And those odds can be shortened by doing everything possible to convey an understanding of the emerging security environment as well as teaching students to recognize and deal with the unexpected. This is the PME challenge.

Managing change is what national security is all about. War colleges must equip leaders to assume this critical responsibility. We must give graduates the tools to function comfortably in a

world where rapid change is the norm. To do so, however, professional military education needs to adapt in three ways. First, we must strengthen the capability to affect the full spectrum of national security policies by embracing added roles for PME. Second, we must revise curricula and supplement the substance of what we teach. Finally, we must update pedagogical concepts, approaches, and technologies.

Like most institutions of higher learning, war colleges can become ivory towers divorced from the world which they serve. If they are to help align military culture with the technological, environmental, and geopolitical revolutions, they must be fully in tune with national security processes which stimulate and implement change. This goes beyond policy formulation and includes technology insertion, doctrine development, planning and budgeting, and training.

How can PME institutions do this? First, they should be "present at creation" to ensure an environment that encourages new thought and rewards rather than punishes innovation. Similarly, they must follow organizational processes for change. War gaming, policy-relevant research, and faculty participation in ad hoc commissions are classic examples. Each war college has a research institute to connect its parent institution with the activities of the national security community.

war colleges must equip leaders to function in a world where rapid change is the norm

Secondly, PME institutions have a responsibility to expose ideas, new as well as old, to the critical light of academe. Wargames and simulation exercises work well. So do informal, off the record discussions between students and visiting lecturers from the policy arena. Each senior PME institution enjoys special relationships with individuals sympathetic to the military and who literally try out new ideas on faculty and students. More of these exchanges are needed with policymakers and leaders who are not instinctively sympathetic to military culture.

Finally, PME institutions have a duty to be harbingers of change. Classes and seminars are common ways for disseminating innovative ideas. So are professional journals. Less developed, but with greater potential, are options associated with the information highway. Without a home page and a routine means for distributing the best of faculty and student research, a war college is simply not doing its job in the information age. In brief, PME can and must play a central role as an agent in altering that greatest barrier to meaningful change—our traditional culture.

Adapting Curricula

In the classroom, as in headquarters or war zones, the basis for innovation lies in critical thinking about capabilities, concepts, and organizations relevant to current and future needs. As in the past, military innovators in the information age must develop an appreciation for what exists as well as analytic skills for critiquing the status quo. It is not a choice between notions of modern warfare and more abstract theories of coercion. Unfortunately, for already tight curricula and busy students, it is a combination of both.

Indeed, because of the complexity of joint and combined operations, curricula must deal with the doctrine and capabilities of multiple nations and services. Moreover, blurred boundaries among military, diplomatic, economic, and psychological tools require unprecedented sensitivity for what policy types call the interagency process. In sum, developing PME curricula—like our security environment itself—is of necessity an exercise in risk limitation. There simply is not the time to cover all contingencies. The most one can do is prepare for dealing with uncertainty.

The classic approach to this dilemma is a balance among academic disciplines, the interests and backgrounds of students, and the demands of theory and practice. Like a classic liberal education, war college curricula must cover a range of academic disciplines that include basic and engineering sciences as well as humanities and the social sciences.

What then is different about curricular requirements today? For a start, the balance of PME has shifted with the advent of the revolution in information technology. While military strategists in past revolutions, such as that brought on by nuclear weapons, tended to be civilian thinkers with humanities and social science backgrounds, the current revolutionary force puts a higher premium on basic and engineering sciences. Historical perspective and an appreciation of bureaucratic politics remain vital, but an adequate intellectual framework in the information age requires some understanding of the ones and zeroes being passed around in such incredible quantities. In short, the center of mass at the war colleges must move toward more technical academic disciplines.

Educational and Research Initiatives

U.S. national security will be increasingly affected by the ability to adapt doctrine, organizational concepts, and operations to fully exploit information technologies. Toward this end, the National Defense University (NDU) has established a teaching, research, and outreach activity to focus on the development of a vision for national security in the information age. The Directorate of Advanced Concepts, Technologies, and Information Strategies (ACTIS), an element of the Institute for National Strategic Studies, merges efforts of the School of Information Warfare and Strategy and the former Center for Advanced Command Concepts and Technology. Working under guidance issued by the Director

of the Joint Staff and the Assistant Secretary of Defense for Command, Control, Communications, and Intelligence, ACTIS serves as a center of excellence for information warfare within DOD. This enhances the educational as well as the research mission of NDU by contributing to knowledge in a rapidly evolving field, offering courses on information warfare, and disseminating material on information warfare.

NDU is currently developing a three-tier educational program for the School of Information Warfare and Strategy. On the first tier information concepts will be introduced and integrated into the core curricula of the National War College and the Industrial College of the Armed Forces. On the second the school will offer a

broad range of information warfare electives to all students at both colleges. Finally, on a third tier, students will be able to select an intense elective program in information studies to become the information specialists of the future.

ACTIS is the DOD executive agent for research on command and control and information warfare and also designs and manages an extensive research and analysis program. In addition, it provides outreach activities, including short programs of instruction, workshops, symposia, and on-line services, and will disseminate information warfare concepts, research, and course material.

JFQ

How We Teach

War colleges justifiably take pride in teaching techniques, which traditionally have included seminar-style classroom interaction as well as lectures by faculty and visitors, many of whom are involved in the policy arena. Excellent student to teacher ratios, as well as diverse student bodies, facilitate the high quality of seminar discussions. Though student diversity across the services and defense-related civilian career fields is most balanced at the National Defense University, service war colleges also ensure student representation from the other services and civilian agencies.

Regardless of quality, however, it is increasingly probable that teaching techniques need to be supplemented to cover a rapidly changing security environment and the increased information age sophistication of incoming students. The

notion that a ten-month experience at a war college is sufficient for students who may serve for a further ten years has always been questionable. Most certainly the accelerating pace

of change today makes it important that we begin to provide follow-on educational opportunities for PME graduates.

Technology for distance learning is available and the cost of personal computers is falling. Military personnel take lap-top computers on temporary duty to communicate with offices, homes, and educational institutions offering degree programs over the information highway. Beginning last year, students at several PME institutions were issued lap-tops. The Air Force Command and Staff College, in particular, has made substantial progress in offering virtual seminars to students on a worldwide basis. Both the Army and Air Force have begun providing lap-tops with modems to general officers. The Army has also funded a leadership development program at the Industrial College of the Armed Forces which will be implemented using lap-top computers.

A major challenge for war colleges lies in developing the substance of follow-on education programs for transmission via the information highway. Simply transmitting research products is an initial but insufficient step. Faculty members whose dialogue with students has been limited to the classroom must develop and conduct virtual seminars using distance learning. In fact, since faculty resources are unlikely to expand, new course development might involve curtailing some existing courses. Before the next century, PME graduates need the option of communicating with war colleges on national security issues.

To conclude, there is a current revolution in PME that parallels the RMA. In both cases, core functions and procedures are undergoing fundamental changes. In both cases, we are seeing disparate rates of progress among the constituent parts. And in both cases, we are facing difficult resource tradeoffs between traditional approaches on the one hand and information age alternatives on the other.

PME institutions must assume the role played by first class research universities. We have a duty to mobilize our institutions to expand knowledge through research, educate practitioners, and serve as catalysts for change through outreach. The war colleges must provide the intellectual capital for changing the existing paradigm.

The stakes are high in the revolutions in military affairs and professional military education. Significant obstacles and inertia must be overcome. The RMA has the potential to alter priorities among service capabilities. Similarly, the revolution in PME—challenging curricula and teaching methods—has the potential to transform war colleges into innovative centers that spawn and foster new concepts of warfare. In the final analysis, both revolutions demand changes in culture. Since PME shapes and promotes service and joint cultures, it would be difficult if not impossible for the RMA to succeed without a corresponding revolution in war college curricula. This places a major burden on those of us involved in PME and requires that we move ahead with the revolution.

JFQ

NOTES

¹ A classic example is found in Edward L. Katzenbach, Jr., "Tradition and Technological Change," in *American Defense Policy*, 5th edition, John F. Reichart and Steven R. Sturm, editors (Baltimore: The Johns Hopkins University Press, 1982), pp. 638-51; also see Stephen P. Rosen, *Winning the Next War: Innovation and the Modern Military* (Ithaca, N.Y.: Cornell University Press, 1991).

² James R. Clapper, presentation at the National War College, February 9, 1995.

³ See Jack N. Merritt and Pierre M. Sprey, "Negative Marginal Returns in Weapons Acquisition," in *American Defense*, 3rd edition, Richard G. Head and Ervin J. Rokke, editors (Baltimore: The Johns Hopkins University Press, 1973).

⁴ William A. Owens, speech to the Retired Officers Association, Des Moines, Iowa, July 1, 1995.

⁵ Wayne A. Downing, presentation at the School of Information Warfare and Strategy, National Defense University, August 16, 1995.

⁶ John M. Shalikashvili, presentation at the National Defense University, August 18, 1995.

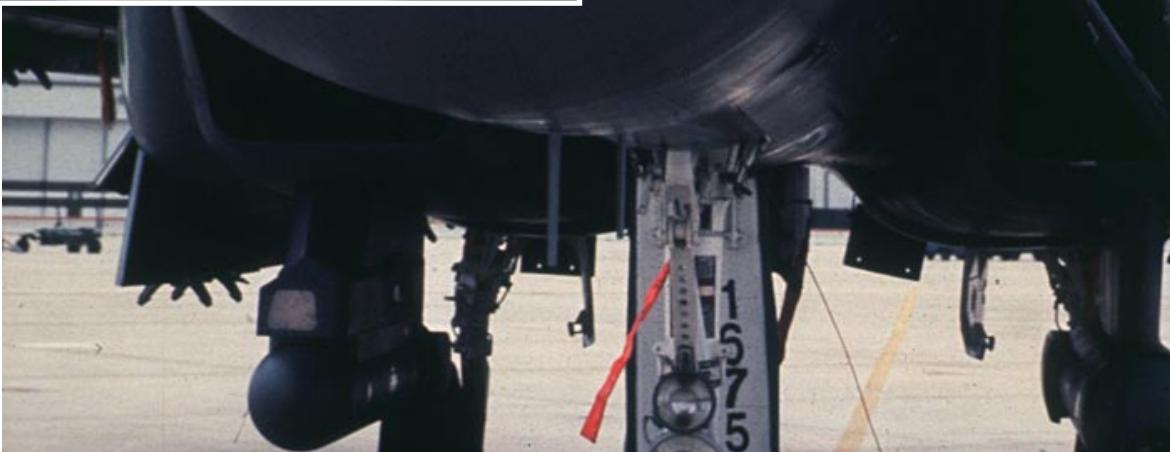


Jointness by Design,

Soldiers on flight deck of
USS Dwight D. Eisenhower.



U.S. Navy (Martin Maddock)



U.S. Air Force (Nydia Ansorth)

Since the passage of the Goldwater-Nichols Act in 1986 it has become politically incorrect to question jointness as *the* preeminent way for the military to do business as a whole. Jointness has also become a panacea for Congress and others in reprioritizing declining defense budgets. As a result, civilian officials and military leaders are accelerating this already fast-moving concept.

NOT ACCIDENT

By MICHAEL C. VITALE

Even though jointness was the *raison d'être* for Goldwater-Nichols, it has never been defined systematically or developed conceptually, as Seth Cropsey noted in "Out of Joint" in the inaugural issue of *JFQ*. It has been invoked to universally justify any and all of the intents identified in that legislation which has created a perception within the military that its overall object was to make jointness an end in itself. While the conduct of recent operations shows major improvements,

needed to efficiently manage its evolution. This can be done by defining jointness precisely, framing the concept of jointness holistically, and devising a process to assess its evolution analytically. This would lead to jointness by design, not accident.

The Problem

Overall, Goldwater-Nichols has enhanced the warfighting capabilities of the Armed Forces. Practically speaking, it has bounded the concept of jointness within

the context of joint operations, particularly in terms of combat.

Therefore the purpose of jointness as it evolves should be directed toward enhancing the effectiveness of operations.

The lack of a theoretical foundation, however, has resulted in a trial and error approach for addressing problems across the range of joint issues. Admiral William Owens, the Vice

Chairman, has stated that experimental approaches are the only practical means of determining how to improve jointness. Unfortunately this has led the Joint Staff, combatant commands, and services to derive coordinated joint processes (in doctrine, training, requirements, et al.) that are stovepiped—isolated from one another instead of thoroughly integrated. While many factors affect jointness, these processes have the greatest impact, and their inefficient design suboptimizes the course of jointness. Not surprisingly, after eight years of nonintegrated processes, the Chairman has said that he is unimpressed with the level of joint warfighting, particularly in terms of doctrine, training, requirements, and readiness.¹

One way to explain the problems these poorly integrated processes cause for jointness is by using a football analogy. Some parts of the game of jointness have been well defined while others have not. The following items have been established since 1986. First, the players (services) have signed multiyear contracts to play on one team (meaning no free agency), though their equipment is funded by boosters (Congress). Second, based on scouting

the Chairman has said that he is unimpressed with the level of joint warfighting

jointness still lacks the theoretical underpinning to resolve all the explicit intents of Goldwater-Nichols.

Jointness is not an end in itself, but it is more than a buzz word. Since the goal of jointness is to enhance military operations, a process is

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reports, management (Chairman, Vice Chairman, and Joint Staff) reviews expensive purchases by players to ensure the equipment meets collective team needs (requirements). A change in management policy has started to directly affect *all* the equipment each player buys for himself.² Third, there is one approved play book (doctrine and tactics, techniques, and procedures) with new plays steadily being written and old ones being revised, although at a slow pace. Fourth, the team practices together more regularly to prepare for each opponent (training and exercises). Fifth, after each game, management and the coaching staff watch postgame films to remedy mistakes (evaluation and analysis). Sixth, the players, coaching staffs, and management are attending schools together to make the team more cohesive (professional military education).

While the team has won several games based on this model, there is still information that players, coaches, management, and the owner lack about the game. While the end zone represents the goal of jointness (enhancing the effectiveness of operations) and can be easily understood, the team does not know the shape of the field. For example, no one has ever specifically defined or explained jointness for players, coaches, management, or the owner. The equivocal definition of jointness supports numerous explicit intentions of Goldwater-Nichols. Only by defining jointness consistently can the team work more efficiently together.

Next, the team has trouble finding the sidelines (football has two dimensions, but jointness has several). If jointness is a way to enhance the effectiveness of military operations, boundaries must be established to define the dimensions in which it operates. Senior leaders can then determine the components in these dimensions and identify relationships among them. This information can then be used to develop a process to measure the effects of various changes on jointness.

Moreover, there are no systematic yardmarkers on the field to tell the team whether they are headed toward the end zone. Markers do not measure the distance to the end zone in themselves, but rather establish minimum

benchmarks needed to make jointness as efficient as possible. Such benchmarks enhance effectiveness and moves the team closer to the end zone. One organizational benchmark of a perfect system of jointness, for example, would be to ensure that functional

determines their relationship with each other, and decides how these processes should be made more efficient.

Finally, perhaps the most critical problem with jointness today is the conceptual void for choosing players for a particular game. Beyond current

service roles and functions, professional military knowledge, budgetary constraints, and obvious political influence, jointness provides no theoretical or practical

methodology for choosing the combination of players best suited to face a particular opponent (this goes to the heart of joint power theory which combines land, sea, air, and space-power synergistically to create power that is greater than the sum of its parts). Unfortunately, the current concept of jointness provides no intuitive guidance except to ensure that every opponent faces a joint team, thereby raising jointness from a *way* to conduct operations to an *end* in itself. Solving this problem is beyond the scope of this article, but it requires continued study.

Many other aspects of jointness can be illustrated by this analogy, but the point is the same: because the concept of jointness is not holistically designed, the Armed Forces continue to

because the concept of jointness is not holistically designed institutionalizing it may not be as effective

joint processes (doctrine, planning, training, etc.) used by unified commands and the Joint Staff also are used by the services for their particular functional processes (that is, the joint doctrine development process would be used to produce service doctrine). This benchmark has major implications for the Armed Forces, but it would also dramatically increase the efficiency and hence the effectiveness of jointness. Thus, establishing the most efficient benchmarks for jointness is required.

There are no linesmen marking the progress of the ball as it moves down the field. Given efficient benchmarks, there is no systematic means of determining if the effectiveness of jointness is enhanced over time. Making this judgment requires an analytical procedure that examines the components and processes of jointness,



U.S. Navy (Robert N. Scoggins)

Seabees arriving in the Middle East.



U.S. Army (Michael Halgren)

address questions of jointness empirically. As a result, institutionalizing it successfully will take much longer and may not be as effective.

A Definition for Jointness

In today's environment, jointness appears to be synonymous with joint military operations. However, Joint Pub 1-02 defines *joint* as "... activities, operations, organizations, etc., in which elements of more than one service of the same nation participate." This is a holistic meaning that covers all contexts; thus the term *jointness* should be used in a holistic sense, not just in the context of military operations.

In defining jointness, the critical question is what makes military operations more effective when conducted jointly? The answer must be extrapolated from the history of military operations. Fortunately, this history has been officially synthesized (albeit with a leap of faith) and codified in contemporary joint doctrine.

To arrive at a definition that is all encompassing rather than focused on operations, we must first look at joint doctrine, which "offers a common perspective from which to plan and operate, and fundamentally shapes the way

we think about and train for war" (according to the first edition of Joint Pub 1). Its point is to "distill insights and wisdom gained from our collective experience with warfare" into basic principles to guide the employment of joint forces. Since its conception in 1986, this has resulted in two genres of publications: joint doctrine and joint tactics, techniques, and procedures (JTTP). The former present principles and the latter address actions and methods to implement joint doctrine and describe how joint forces are to be employed.

A survey of fifty joint publications under development and fifty approved reveals only two that provide any conceptual, all encompassing discussion of joint warfare or joint operations: Joint Pub 1, *Joint Warfare of the U.S. Armed Forces*, approved in 1991, and Joint Pub 3-0, *Doctrine for Joint Operations*, the keystone volume in the operations series that underwent a long period of development before being approved in 1993. Readers of these two publications can draw different interpretations regarding the principles of joint warfare; however, those found below are based on characteristics that allow joint forces to be more effective than single-service forces. They do not restate doctrine, but rather synthesize various principles, concepts, and ideas

from both documents with the aim of revealing the true nature of jointness.

First, based on unity of effort, jointness seeks to focus all the energy of the Armed Forces across the full range of military operations, throughout all the levels of war (strategic, operational, and tactical), in every environment (peace, crisis, and war), toward enhancing the effectiveness of military operations. While this centers on joint combat operations, it can also be applied to all other joint military activities, including those conducted in peacetime.

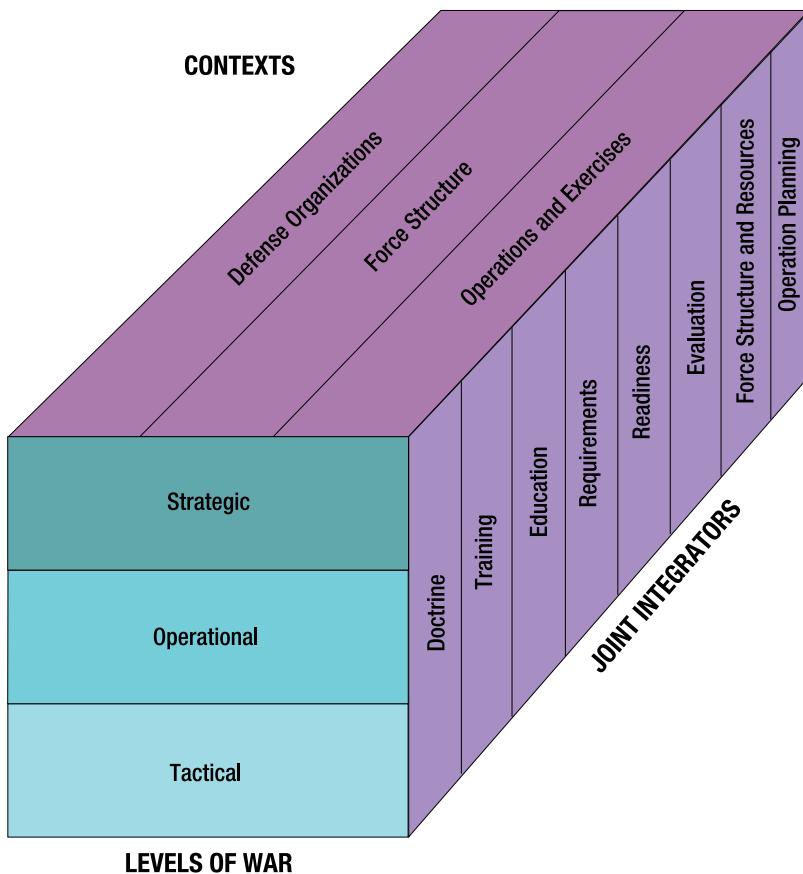
Second, joint forces provide commanders with multidimensional capabilities (land, sea, air, space, and special operations) that are more effective than uni-service forces by providing a wider range of operational and tactical options which pose multiple, complex problems for an enemy.

Last, multiple service capabilities allow an innovative JFC to combine joint capabilities, tactics, techniques, and procedures in asymmetrical as well as symmetrical ways synchronized to produce a total military impact greater than the sum of its parts.³ Achieving this effect is the most important tenet of jointness since it allows JFCs to present few exploitable seams while taking advantage of enemy weak points. In addition, this synergism can be compounded as the effects are synchronized and integrated throughout the theater, including the rear area.

The synergistic effects of synchronized joint forces are not limited to operations but include other military activities. For example, this synergism can come from synchronizing the key "joint integrators," defined as those common joint functions that focus and integrate the efforts of the Armed Forces in preparing for and conducting military operations. Besides joint doctrine, these include joint training and exercises, professional military education, operation planning, force structure and resource planning, evaluation, requirements, and readiness.

Hundreds of examples illustrate how these integrators affect military operations. One is the synergistic effect of synchronized joint military education, which increases cooperation among all officers at the expense of

Framework for Jointness



service parochialism and is a key intent and successful result of the Goldwater-Nichols Act. When this is coupled with teaching newly approved joint doctrine at these institutions, jointness is enhanced significantly. Therefore, neglecting to systematically focus the efforts of all joint integrators fails to maximize one of the most important characteristics and inherent strengths of jointness.

Given this, we can begin to define jointness through generalizations. First, it is a focused effort by the Armed Forces across all levels of war. Second, while it primarily relates to the use of joint forces to conduct military operations, it should embrace all joint activities. Third, joint forces are more capable than uni-service forces because

their inherent multidimensional capabilities offer more options to JFCs. Fourth, JFCs must synchronize capabilities for synergistic effectiveness. Fifth, for jointness to be optimized, synchronization must be conducted across all joint integrators, not just joint operations. Jointness then can be defined as a holistic process that seeks to enhance the effectiveness of all military operations by synchronizing the actions of the Armed Forces to produce synergistic effects within and between all joint integrators at every level of war.

A Framework and Process

With that definition we can see that the framework of jointness contains three dimensions: the contexts of jointness, doctrinal levels of war, and joint integrators. As mentioned earlier,

joint integrators are common joint functions that focus and integrate the efforts of the Armed Forces as they prepare for and conduct joint military operations. This dimension of the framework includes eight established joint integrators: doctrine, training, operational planning, education, readiness, force structure and resource planning, evaluation, and requirements.

The levels-of-war dimension helps decisionmakers to visualize a logical flow of operations, allocate resources, and assign tasks.⁴ The levels are usually divided into strategic, operational, and tactical. Although there are no limits or boundaries between them—given the information systems available to both decisionmakers and the public today—the levels undergo a serious compression or flattening out. This phenomenon blurs distinctions among the levels more than before, making it harder to identify unique processes.

The contexts of jointness refer to settings in which jointness could be applied by CJCS and JFCs to enhance the effectiveness of joint military operations. As indicated, this occurs mainly in joint operations, but two other areas directly affect joint force operations, namely, force structure and defense organizations. Force structure refers to the number, size, and composition of the units that make up the Armed Forces (both personnel and equipment). Defense organizations refer to institutions that primarily control processes that directly or indirectly affect joint military operations. Typically, they include, but are not limited to, the Office of the Secretary of Defense, Joint Chiefs of Staff, Joint Staff, combatant commands, defense agencies, and services. Also, as exercises are designed to emulate operations, they are included in the context of joint operations. In sum, the contexts used in the framework of jointness are joint operations and exercises, force structure, and defense organizations.

With jointness thus defined and framed (see figure), we must develop the analytical process for continually evaluating its evolution. A process should not be formed without understanding the system on which it is based and a system cannot be shaped without knowing how it will function.

Thus, a vision of the future system is the first step. This is critical because one must understand how all components among the dimensions have interfaced in the past as well as how they should be combined to achieve the greatest efficiency and effectiveness in the future.

Next we must survey jointness by breaking it into component blocks and identifying their contents. (The individual blocks are located where components of the three dimensions converge; for instance, blocks are found where joint doctrine, organizations, and the strategic level intersect.) The

joint forces get doctrine two years after new operational capabilities

contents of each block would include all the joint processes (broken down to their respective inputs, outputs, constraints, and resources) whose interactions directly or indirectly affect military operations. Next, the connections (or interfaces) between every element of each process within the block are identified to determine where inputs or outputs for each process are located. Once the contents of blocks are identified, the interfaces leading from each block must be connected with the appropriate processes in other blocks.⁵

After every joint process in the framework is identified, the next step is to determine where the current ones are inefficient. The analyst must first identify all the benchmarks of each process and determine which are acceptable or must be modified, also which are missing and must be established. Then analysts can determine needed changes for each process in the framework. Recommended changes can then be gamed to determine if they increase the efficiency of jointness. If validated, they can at last be implemented.

While it is beyond the scope of this article to survey jointness (identifying all its processes, interfaces, and disconnects as well as establishing all the benchmarks within the framework), it is useful to provide a comprehensive example of how the framework could enhance the effectiveness of jointness. The following example

shows how an inefficient benchmark can lower effectiveness.

This established benchmark (yardmarker) requires joint doctrine to be developed for extant capabilities.⁶ Joint forces thus get joint doctrine two years after new joint operational capabilities. An initial look at the current framework reveals that two joint processes affect this yardmarker, the development of joint doctrine and requirements. Further analysis reveals no relationship between the requirements process and doctrine development, which is unfortunate. For example, two joint surveillance target attack radar system (JSTARS) aircraft (under development) were rushed to the Persian Gulf during Desert Storm to enhance coalition surveillance capabilities.

Virtually none of the forces in the theater were aware of JSTARS capabilities or had an operational concept to employ it. More importantly, these forces had not developed trust in the data which this system produced to fully exploit it. Most of these problems were eventually overcome and the aircraft yielded crucial information that contributed to success on the ground. But operational concepts developed while learning how to employ these aircraft could have been mitigated had some conceptual doctrine been developed concurrently with the program and promulgated when these aircraft deployed.⁷

There are other effects. As joint forces await the approval of doctrine, they must develop ad hoc field doctrine in lieu of settled doctrine or JTTP. Once the approved doctrine appears, it may be more difficult to train these forces with it because they have developed a different way to use the capability. Moreover, after working with a capability for two years, their doctrine has operational reality and may be better. Field agents from the Joint Warfighting Center (JWFC)⁸ evaluating joint exercises have reported to the Joint Staff and combatant commands that few joint forces are using doctrinal publications and recommend an immediate revision to align them with

operational reality. This problem has an exponential quality because as the view of doctrine as outdated is reinforced among the Armed Forces, it decreases the credibility of joint doctrine.

After an initial survey of jointness, the resulting assessment would adopt a benchmark of jointness (as well as many other benchmarks) to ensure joint doctrine is approved and promulgated with new joint operational capabilities. Thus, a change in the joint doctrine development process to produce conceptual doctrine (operational concepts) for non-extant capabilities must be made. While the JWFC is tasked with developing conceptual joint doctrine, whatever process is being generated has not yet been linked with current doctrine generation. Moreover, this concept of doctrine is not specifically related to new joint programs which are funded and under development, but to new conceptual thinking about joint warfare. This change would then couple the development process to new acquisition programs as they are approved.

When a program is approved, a conceptual doctrine study would determine how the new capability would affect joint doctrine. Given the current 24-month development cycle for doctrine, this study would recommend one of four courses of action two years before the program enters the initial operating capability stage: (1) do nothing, (2) develop doctrine and/or JTTP to account for the new capability, (3) revise current doctrine and/or JTTP for the capability, or (4) pursue courses two and three. This would eliminate the lag time between extant doctrine and new capabilities.

Finally, those changes should be gamed to determine their impact on other processes and to negate their effects. Viable decisions can then be made so that they have a "value added" effect on jointness.

Given a definition, framework, and analytical process, several conclusions about jointness can be reached. First, the effectiveness of joint change is directly related to the rate of that change. For example, while the Chairman has said that the pace of joint doctrine development is too slow, that

pace also must accommodate numerous revisions in doctrine almost as soon as it is approved. Thus, before the military becomes familiar with doctrine through education, training, exercises, and operations, it changes. Yet given the evolving nature of jointness, the present 24-month development and 18-month revision cycle will constantly force joint doctrine to catch up with tactics and capabilities. The trade-off is that if both cycles are reduced, the quality of joint publications (which is directly proportional to development time) will decline.

The faster the joint environment changes, therefore, the less time there is for the military to adapt and opti-

the Chairman should task an existing thinktank to develop a plan for instituting and monitoring jointness

mize itself. Conversely, the slower change occurs, the better the chance to adapt and become more effective—at the risk of failing to optimize the latest tactics and capabilities. Hence, senior military leaders must be sensitive to the pace of change and its effect on jointness.

Second, because jointness relies on developing synergistic effects, which in turn depend on multidimensional and overlapping capabilities, there is a direct relationship between effectiveness and the capabilities available to a JFC. The greater the number of capabilities, the greater the ability to innovate and enhance the effectiveness of joint operations. Therefore, effective jointness means maintaining the greatest breadth and depth of joint and service capabilities possible. In addition, efforts to satisfy the intent of Goldwater-Nichols “for more efficient use of defense resources” by streamlining redundant service capabilities must be weighed to ensure that any consolidation will not adversely affect joint warfighting.

Third, to maximize effectiveness, joint integrators must have a common frame of reference. Some integrators share frames of reference but others do not. For instance, joint planning and training processes are based on mis-

sions, the doctrine process on *the range of military operations*, and the requirements process on *capabilities*. Until all frames of reference are harmonized, joint effectiveness will continue to be suboptimized.

Fourth, the Chairman should task an existing thinktank (such as the Institute for National Strategic Studies at the National Defense University) to develop a vision, definition, and plan for instituting and monitoring jointness. This should lead to a master plan for implementing a method of holistically designing jointness in the Armed Forces which, at a minimum, would have three parts. The first would consist of an initial assessment of jointness by creating a permanent process for surveying it based on the framework discussed above. This process would identify all benchmarks, processes, interfaces, and disconnects

in the current system, develop benchmarks for a future system, develop recommended changes to the current system, and game those changes to determine their holistic effects. This routine would be repeated until every combination of change was gamed to learn which blend added the greatest value to jointness. This package would then go to CJCS for review and approval. The second part of the plan would create a jointness oversight board comprised of former officials and retired officers with extensive joint experience to advise the Chairman on recommendations made by the process as well as to make additional suggestions. The third part would establish a permanent mechanism for nonintrusively monitoring jointness by using the framework and tracking changes to ensure their successful implementation. This would be the functional equivalent of conducting a “net assessment” of jointness.

While the above plan for a holistic concept of jointness is achievable in the short term, the real test of whether it adds value to jointness and improves the effectiveness of the Armed Forces can only be known through actual op-

erations. Given that the high number and tempo of operations experienced over the last few years will continue, it will be possible to make such a qualitative and quantitative assessment and continue to refine the design.

Lastly, the present state of jointness suggests uncertainty about its future. What will be its next level? Admiral Owens suggested in these pages that it will be reached when the Armed Forces form standing joint commands to operate continually. While this is one direction the military might take, the next step toward greater jointness may not involve moving to another level; rather it could entail continuing to conceptualize what jointness should be so that it can be designed to get us to the end zone in ten plays instead of fifty.

JFQ

NOTES

¹ Sean D. Naylor, “Shali Slams Services for Lack of Joint Doctrine,” *Navy Times*, September 12, 1994, p. 5; “Gen. Shalikashvili Sees Gap in Joint Force Ops,” *National Defense* (October 1994), p. A15.

² Bradley Graham, “Military Leaders Join Forces to Plan for Future,” *The Washington Post*, August 22, 1994, p. A15.

³ See Philip D. Shutler, “Thinking about Warfare,” *Marine Corps Gazette*, vol. 71, no. 11 (November 1987).

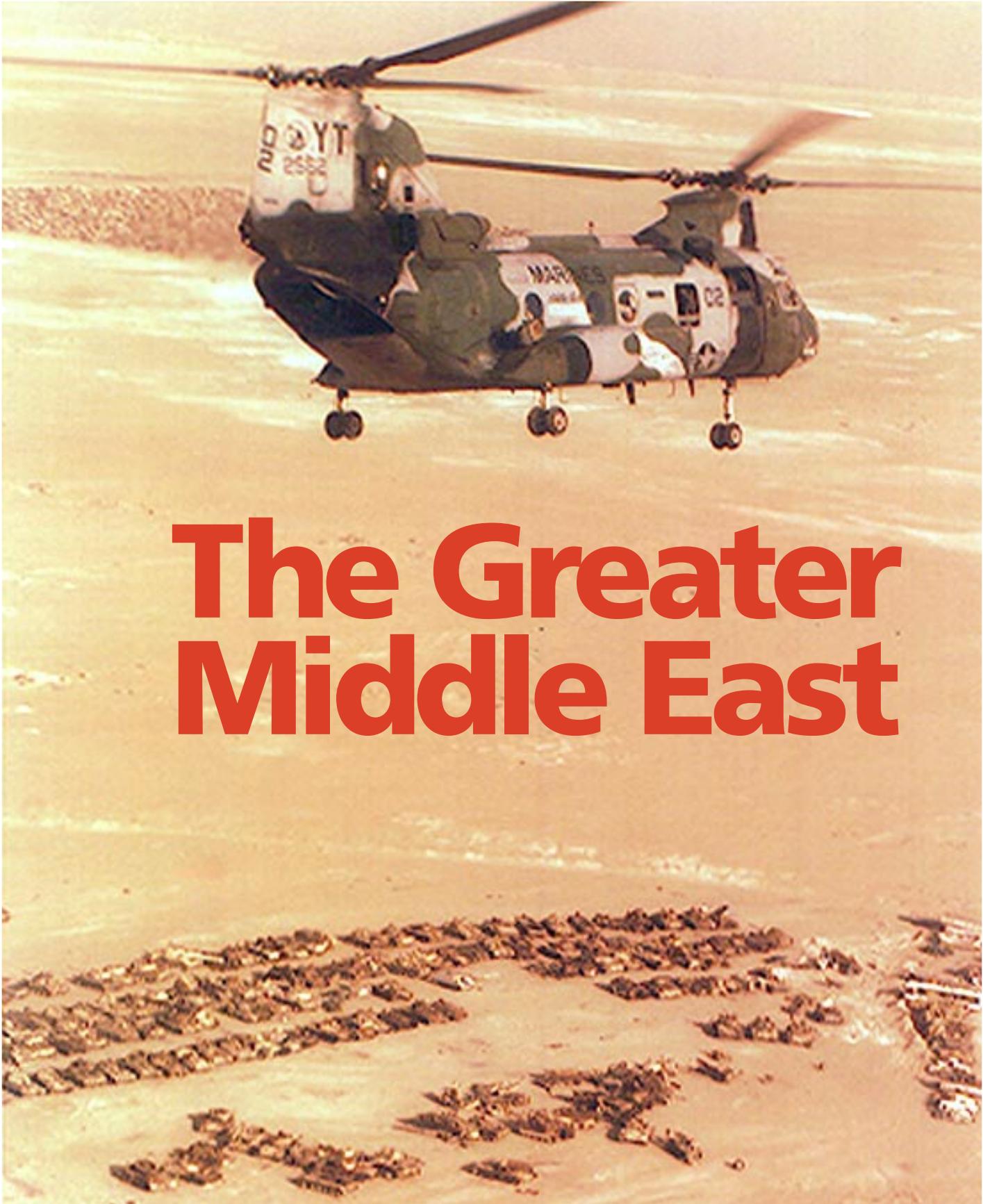
⁴ Department of the Army, FM 100-5, *Operations* (Washington: Government Printing Office, June 1993), p. 6-1.

⁵ Available DOD modeling programs include Integration Definition Language (see Federal Information Processing Standards 183 and 184).

⁶ *Joint Doctrine and Joint Tactics, Techniques, and Procedures Development Program*, Joint Pub 1-01, chapter 1 (Washington: Government Printing Office, July 1992), p. I-2.

⁷ Thomas A. Keaney and Eliot A. Cohen, *Gulf War Air Power Survey Summary Report* (Washington: Government Printing Office, 1993).

⁸ Based on its draft “Activation Plan” (October 27, 1994), the JWFC mission is to “assist the CJCS, CINCs, and service chiefs in their preparation for joint and multinational operations in the conceptualization, development, and assessment of current and future joint doctrine and in the accomplishment of joint and multinational training and exercises.”



The Greater Middle East

U.S. Marine Corps (U. R. Tricocche)

The Five Pillars of Peace in the Central Region

By J. H. BINFORD PEAY III

On October 6, 1994, reports poured into the command center at U.S. Central Command (CENTCOM) that two Iraqi Republican Guard divisions were moving by both rail and heavy equipment transporters southward from their garrisons near Baghdad to assembly areas south of the Euphrates. Eight divisions threatened Kuwait with lead brigades located only fifteen miles from the border. Bellicose rhetoric, the massive scale and tempo of mobilization and deployment, uploaded ammunition, the high state of air defense readiness, and other indicators all pointed to a possible repetition of the 1990 invasion. While unable to predict Saddam Hussein's intentions, American analysts concluded that Iraq would be capable of attacking Kuwait with five divisions in seven days.

Viewing a renewed Iraqi threat to Kuwait and Saudi Arabia as unacceptable, the President directed the Secretary of Defense to immediately act in order to deter and, if necessary, block an Iraqi offensive. CENTCOM at once modified on-the-shelf operational plans and orchestrated the deployment of units from all services in what became known as Operation Vigilant Warrior. Postured to prevent Iraqi aggression against Kuwait and Saudi Arabia, the command built both on the combat power of U.S. forward deployed and coalition forces and on American prepositioned equipment ashore and afloat to emplace a defensive force.

On October 10, as the first U.S.-based aircraft began landing at airfields

in the Persian Gulf and lead companies of the 24th Infantry Division began moving to tactical assembly areas, Iraq announced the withdrawal of reinforcing Republican Guard divisions thus defusing the situation. This recent demonstration of coalition resolve convinced Iraqi leaders that the risk of confrontation was too high. To emphasize the American commitment to support regional security and to ensure that Saddam Hussein did not reverse his decision to withdraw, CENTCOM continued the flow of forces to the Persian Gulf. By the end of October, the aircraft carrier *USS George Washington*, 2,000 marines aboard the *USS Tripoli* amphibious ready group, four Aegis cruisers, reinforcing Air Force squadrons with 275 aircraft, nearly a battalion-equivalent of special operations forces, and two brigades of the 24th Infantry Division joined the composite wing of JTF Southwest Asia (JTF-SWA) and U.S. Naval Forces Central Command operating within the region. Another 700 aircraft and 60,000 troops of the First Marine Expeditionary Force (MEF), the 101st Airborne and 1st Cavalry Divisions, and III Corps headquarters awaited deployment orders. This impressive display of power projection achieved in days what had taken weeks during Desert Shield.

The success of Vigilant Warrior as well as other operations—United Shield in Somalia, Southern Watch in the skies of southern Iraq, and maritime intercept operations in the Arabian Gulf—illustrates the depth of our understanding of the often paradoxical dynamics of the region. A vast geographic area of 19 nations, it extends

from the Horn of Africa and Egypt through Jordan and the Gulf states to Afghanistan and Pakistan. Though these nations share common cultural and religious traits, they are singularly and collectively unique.

CENTCOM operational accomplishments also reflect flexibility, versatility, and readiness to undertake a complex mission: promoting regional interests, ensuring an uninterrupted supply of resources, helping friendly states provide their own defense and contribute to collective security, and deterring attempts by regional states to achieve geopolitical gains by threat or use of force. To accomplish this mission, the command pursues a theater strategy that deals with the challenges of today while preparing for those of the next century.

The Region Today

Maintaining regional stability and security in the Persian Gulf is integral to the political and economic well-being of the international community. Some 65 percent of the world's proven oil reserves are located in this region which supplies the United States 22 percent of its requirements, Western Europe 43 percent, and Japan 68 percent—with some experts suggesting these numbers will increase by 10 percent over the next decade. What is more, much of this oil must transit the Strait of Hormuz, Bab El Mandeb, and Suez Canal, all choke points dominated by regional states. Oil supports a vibrant economic relationship between the United States and the Middle East in areas such as military equipment, construction services, and consumer goods. In 1993, for example, U.S. exports to the region were nearly \$20 billion while imports totalled about \$21 billion. While low oil prices have

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E-3 AWACS during Bright Star '94.

forced local states to reduce major purchases, the Middle East continues to be an important commercial market, offering significant long-term economic benefits.¹

These factors account for America's vital interests in the region: maintaining a free flow of oil at stable and

reasonable prices, ensuring freedom of navigation and access to markets, assuring the safety of U.S. citizens and property, and promoting the security of friendly states while helping to build a comprehensive peace. Other concerns include promoting respect for fundamental rights and democratization, providing humanitarian assistance, countering illegal trade in drugs, fostering economic development, preventing the proliferation of weapons of mass destruction, and defeating terrorism.

Though it lost more than half of its conventional military capability in the Gulf War, Iraq still has the largest army in the region. That fact, along with Saddam's defiance of post-war U.N. resolutions, alarms neighboring states. Since the war Iraq has rebuilt much of its conventional military industrial infrastructure, and the October 1994 troop movements that precipitated Vigilant Warrior established Iraqi capabilities to mobilize and move large numbers of forces quickly to threaten

the CENTCOM area of responsibility is situated astride several fault lines

reasonable prices, ensuring freedom of navigation and access to markets, assuring the safety of U.S. citizens and property, and promoting the security of friendly states while helping to build a comprehensive peace. Other concerns include promoting respect for fundamental rights and democratization, providing humanitarian assistance, countering illegal trade in drugs, fostering economic development, preventing the proliferation of weapons of mass destruction, and defeating terrorism.

Safeguarding these vital and enduring interests is a herculean undertaking. In terms of both conflict and culture the CENTCOM area of responsi-



Kuwaitis on firing line for Vigilant Warrior.

U.S. Air Force (Dave Nolan)

U.S. Air Force (Tracy Hall-Leary)

Kuwait and Saudi Arabia. All this indicates that lifting U.N. sanctions will certainly lead to Iraqi rearmament.²

Fifteen years after its revolution Iran is competing with Iraq for domination of the Persian Gulf while simultaneously seeking to lead the Islamic world. Its vast oil reserves, many engineers and technicians, and large population permit it to overcome internal unrest and economic malaise to satisfy its ambitions. This is evident in extensive weapons development and the procurement of submarines, attack aircraft, and anti-ship missiles. With these resources Tehran has underwritten political and Islamic extremists worldwide, militarized the disputed islands in the Strait of Hormuz, and tried to torpedo the Middle East peace process. Uncompromising devotion to such policies indicates that Iran will remain a threat to its neighbors for the foreseeable future.

Tensions based on Iraqi and Iranian belligerence, combined with other sources of conflict and extremist movements, are inflamed by the proliferation of weapons of mass destruction. Some nations in the CENTCOM

region, such as Iraq and Iran, are hard at work attempting to steal, buy, produce, and fabricate ballistic and cruise missiles and nuclear, biological, and chemical weapons. The difficulty of their quest is eased by the willingness of nations such as North Korea and China to sell advanced weaponry to anyone with hard cash. The situation is made more worrisome by the ease with which older systems can be improved through purchases of off-the-

our long-term goals are best achieved by emphasizing cooperative relationships and coalitions

shelf technology. Such advances in weaponry and the nature of regional threats pose an ominous challenge for the United States. As potential foes continue to procure sophisticated systems and harden and conceal command and control, launch, research and development, and storage sites, the Armed Forces will have increasing difficulty finding and striking them.

Theater Strategy

Designing a strategy that protects American interests in this vital region is a daunting task. Innovative ways must be found to conduct operations over lines of communications that stretch more than 7,000 miles from the United States. Conversely, the distance from Iraq to Kuwait City and its surrounding oil fields is about the same as that from Washington to Richmond. Planning must compensate for the dearth of formal agreements and alliances with local states. Associated policies and operations must reflect a sensitivity to regional cultures. U.S. forces must be able to defeat adversaries ranging from insurgents to modernized land, sea, and air forces while remaining versatile enough to respond to terrorists, drug traffickers, environmental disasters, epidemics, and famine. Finally, they must be able to do it in a rugged terrain and harsh climate.

Thrust into a more prominent role after World War II, the United States viewed the region through the

lens of the Cold War. Policies were pursued with the aim of denying the Soviet Union access. In this spirit, America relied upon the "twin pillars" of Saudi Arabia and Iran to promote regional peace and stability until the late 1970s. The Soviet invasion of Afghanistan and collapse of the Shah of Iran's regime in 1979 disrupted this strategy and raised questions about U.S. ability to secure access to Persian Gulf oil and meet commitments to friendly Arab states and Israel. In response, President Carter proclaimed in January 1980 that any attempt by an outside force to gain control of the region would be regarded as an assault on our vital interests. To add weight to that statement, he established the Rapid Deployment Joint Task Force (RDJTF) in March 1980.

Standing up RDJTF amounted to conceding failure in solving the knotty strategic dilemmas of the previous three decades. RDJTF had to contend with many of the same difficulties that had earlier plagued Strike Command and Readiness Command: long lines of communications, lack of forward-based assets, limited access to states of the region, a poor understanding of local cultures and regimes, insufficient forces, inadequate funding, and overlapping command responsibilities.

It was in this context that the Reagan administration established CENTCOM in 1983. The command matured over time under the leadership of Generals Kingston, Crist, Schwarzkopf, and Hoar. Operational plans, security assistance, and exercises reflected a sophisticated appreciation of regional challenges. In a succession of operations that culminated in Desert Storm, the command hammered out agreements with regional states, formed ties with local leaders, learned to oversee joint and multinational operations, and capitalized on superior American military professionalism and weaponry.³ In the aftermath of the Gulf War and collapse of the Soviet Union, CENTCOM strengthened the U.S. strategic position by improving access to the region, enhancing military-to-military contacts, building local forces, upgrading security assistance and exercises, and

deriving full benefit from a limited forward presence. This was the blueprint for a new theater strategy.

CENTCOM is building on these experiences and moving into the next century with a clear strategic vision:

...to be a flexible and versatile command—trained, positioned, and ready to defend the Nation's vital interests, promote peace and stability, deter conflict, and conduct operations spanning the conflict continuum; and prepared to wage unrelenting, simultaneous joint and combined operations to achieve decisive victory in war.

In the spirit of this vision, CENTCOM pursues a multifaceted strategy to address mutual security concerns of the United States and its regional partners. This strategy is oriented toward promoting peace and stability, deterring conflict, limiting the intensity of conflict should deterrence fail, and providing mechanisms to prevail in combat operations when required. It is a flexible strategy that applies to each subregion, capitalizes on personal relationships forged with local friends over a half century, and builds on the success of Desert Storm. While the command retains the capability to act unilaterally, our long-term goals are best achieved by emphasizing cooperative relationships and coalitions that are prerequisites for deploying and employing forces in the Gulf.

CENTCOM forges partnerships and coalitions through a long-term, flexible, three-tiered approach to deter aggression and fight if deterrence fails. The first tier, national self-defense, calls for each nation to bear primary responsibility for its protection. During heightened regional tension or hostility, friendly states would form the second tier, collective defense. This is best exemplified by the members of the Gulf Cooperation Council (GCC) in forming a multinational force known as Peninsula Shield. Finally, on the third tier, the United States and other extra-regional allies would join in meeting a threat to the region. This approach and associated initiatives offer another benefit by strengthening links between the United States and regional militaries, relationships that promote peace and stability.

Seabees coming ashore in Egypt.



U.S. Army (Michael Hargray)

U.S. Air Force (Blaze Lipowek)



Arriving in the Gulf, October 1994.

Five Pillars of Peace

The above fundamentals underpin the five pillars of the CENTCOM theater strategy: power projection, forward presence, combined exercises, security assistance, and readiness to fight. The first pillar includes activities and qualities of the Armed Forces that support rapid projection of extra-regional forces and their combat positioning. Deploying and equipping these forces depends on strategic airlift and sealift and the availability of en route basing worldwide. It also relies on the prepositioning of equipment and supplies on ships. This includes 12 vessels carrying an Army brigade set of equipment, 15 comprising Marine Corps maritime prepositioning squadrons, three with Air Force supplies and ammunition, and five containing Army port opening equipment. Through these resources and more planned, the command can reduce the time-distance hurdles.

The second pillar, forward presence, is the most visible indication of U.S. commitment. With few permanently assigned forces and as the only

theater warfighting headquarters that is not located in its area of responsibility, the command must rely on forward presence to deter conflict, enhance

access, and support the transition from peace to war. At the same time, it is balanced around land, sea, air, and special operations forces to limit the U.S. footprint while simultaneously positioning potent combat power forward.

With a limited footprint and significant lethality, naval forces are well suited to meet competing operational requirements. Under U.S. Naval Forces Central Command and Fifth Fleet, the naval component includes, on a recurring basis, a carrier battle group, an amphibious ready group, and cruise missile-equipped surface ships and submarines. In addition to supporting recent operations in Somalia and Kuwait, CENTCOM naval forces continue to conduct maritime intercept operations pursuant to U.N. sanctions against Iraq with nearly 23,000 challenges and over 12,000 boardings since August 1990.

The compact but lethal 4404 Provisional Air Wing conducting Operation Southern Watch under the command of JTF-SWA complements naval forces. Reconnaissance, attack, and support aircraft of the wing provide constant surveillance of southern Iraq

and are prepared to counter Iraqi aggression. Since JTF-SWA inception in August 1992, its aircraft have flown 60,000 sorties, 47,000 over Iraq alone. As seen in Vigilant Warrior, the JTF command and control apparatus is capable of orchestrating both land based and naval attack aircraft—a significant improvement over the situation in August 1990.

Forward deployed Patriot batteries and SOF detachments constitute the ground dimension of forward presence. Though more limited in scope than forward positioned naval and air forces, these units contribute to deterrence by strengthening CENTCOM capabilities. Patriot missiles, for example, could counter an enemy with ballistic missiles by safeguarding key facilities. Similarly, SOF personnel improve the combat skills of regional militaries, enhance coalition interoperability, and reduce the risk of fratricide during combat.

Another aspect of forward presence is the prepositioning of equipment ashore, a strategic linchpin that complements strategic lift and prepositioned equipment afloat to further reduce time-distance challenges and related risks to early deploying forces. In crisis, prepositioning facilitates sustainment of theater forces and rapid introduction of mechanized ground forces. Accordingly, the command maintains hundreds of Army, Navy, and Air Force vehicles and thousands of tons of

(continued on page 38)

U.S. CENTRAL COMMAND

MISSION: The primary mission of U.S. Central Command (CENTCOM) is to prevent military coercion of friendly states and deter attempts by hostile regional states to achieve gains by a threat or use of force; and to help friendly states to provide for their own security and contribute to the collective defense. The command also puts military capability behind national commitments to the region by preserving and protecting access to the oil supplies of the Persian Gulf. The CENTCOM

area of responsibility includes 19 countries located in southwest Asia and Africa.

BACKGROUND: CENTCOM was activated on January 1, 1983. It met the requirement for a major theater command to serve U.S. interests in Southwest Asia and Persian/Arabian Gulf region. Tension in the area began to



American and Jordanian aircraft during Infinite Acclaim.



Kuwait.

55th Signal Company (Casey T. Smith)



U.S. Navy (Jim Grant)

heighten in the late 1960s and early 1970s following Great Britain's withdrawal from east of Suez. The Iran revolution of 1979 and the Soviet invasion of Afghanistan in 1979-80 changed the balance of power which clearly addressed the need for a counter-balancing force to maintain regional stability.

COMPONENT COMMANDS: U.S. Army Forces Central Command (ARCENT); U.S. Central Command Air Forces (CENTAF); U.S. Naval Forces Central Command (NAVCENT); U.S. Marine Corps Forces, Central Command (MARFORCENT); and Special Operations Command Central (SOCENT).

JFQ

U.S. Army (David M. Rafto)



Mogadishu airport.



U.S. Navy (Rhonda Bailey)

Countries assigned to the CENTCOM area of responsibility.



U.S. Air Force (David Craft)

Perimeter guard at Patriot missile site.

(continued from page 35)

equipment and supplies throughout the region. A main feature is a prepositioned heavy brigade set of equipment in Kuwait. At the same time, efforts are progressing on placing a second brigade set with division support equipment in another Gulf state as well as on exploring the possibility of positioning a third on the ground elsewhere in the region. With a heavy division set of equipment positioned ashore, CENTCOM would enjoy improved operational flexibility to deal with a full range of threats and to correspondingly strengthen the deterrent effect of forward presence.

Combined exercises enrich the other pillars of the theater strategy by serving as vehicles for power projection, promoting forward presence, honing combat skills, broadening access, fostering military-to-military rela-

ercise in Kuwait; and Ultimate Resolve, a command post exercise in the Gulf.

Closely associated with combined exercises is security assistance, a pillar which offers another avenue for satisfying legitimate self-defense needs of regional friends. It is comprised of four major elements: foreign military sales, foreign military funding, mobile training and technical assistance teams, and international military education and training (IMET).

Foreign military sales in the region account for a large proportion of America's worldwide total—46 percent for FY90-FY94 and 36 percent in FY95, with sales reaching \$2.76 billion. Most Gulf states prefer U.S. hardware and have negotiated for major systems to include F-15 and F-16 fighters, Abrams tanks, Bradley fighting vehicles, Patriot missiles, and Apache helicopters. These sales offer tangible benefits to American industry and are an effective

such as human rights and civilian control of the military advances responsible defense management and democratization in their nations.

Together these elements of security assistance reinforce forward presence and combined exercises to accentuate access, strengthen military-to-military contact, encourage leaders to respect human rights, and over time support greater democratization. Also, security assistance is pivotal in coalition building by promoting all three tiers of the U.S. regional defense program.

The fifth and final pillar, readiness to fight, is oriented toward producing operational plans to support the national military strategy and ensuring that the battle staffs of CENTCOM headquarters and service components possess the equipment, procedures, and skills to deploy rapidly in a crisis and conduct high tempo joint and multinational operations. These goals are achieved with the other four pillars and by routine wargaming of operational plans and frequent conferences among joint, component, and service staffs. The command maintains a high level of readiness through a series of rigorous exercises. In addition to exercises in the region, the command conducts or participates in three others in the United States: Internal Look, conducted biennially, involves all components; Roving Sands is a theater missile defense command post and field training exercise; and Blue Flag is an air operations command post exercise. Collectively, the exercises enhance the proficiency of battle staffs in the full range of combat functions.

The flexibility, versatility, and readiness of CENTCOM were tested most recently during United Shield in January-February 1995. To withdraw the remaining U.N. peacekeepers and their equipment from Somalia, a U.S.-led combined JTF took charge of 21 American and allied ships, 75 aircraft, and 7,700 personnel in and around the area. The operation was fraught with danger. Although Somali clan leaders assured the United Nations that they would not hinder a withdrawal, questions lingered about their sincerity and ability to control their warrior factions. The command was determined to avoid bloody street fighting and

security assistance offers another avenue for satisfying legitimate self-defense needs

tionships, and stimulating development of coalition warfighting procedures. CENTCOM is on track in generating a combined warfighting capability comprised of 14 regional states by 2001. In FY95, for example, the command conducted a total of 85 land, sea, air, and special operations exercises. While many were relatively small or component-oriented, a growing number are both joint and multinational. This trend will expand as part of an effort to increase joint activities while improving readiness among regional partners in the long term. Frequent exercises in Bahrain, Egypt, Jordan, Kuwait, Qatar, Oman, Saudi Arabia, the United Arab Emirates, and Pakistan focus on improving the warfighting capabilities of friendly nations and ensuring continued access in the region. The sophistication of these exercises will grow to include other nations, which will enlarge a second set of command post and field training exercises that focus on boosting coalition warfare. They include Bright Star, a field exercise in Egypt; Intrinsic Action, a joint multinational training ex-

means of upgrading regional military capabilities and boosting interoperability among U.S. and local forces. Similarly, foreign military funding helps poorer countries meet their legitimate self-defense needs through grants and transfers of excess defense articles.

Modern weapons alone do not produce reliable and combat ready forces. Comprehensive training is needed to mold skilled, highly motivated soldiers and competent leaders. To this end, the United States relies on the 1,000 to 1,500 personnel who make up mobile training and technical assistance teams. The benefits of these teams go beyond improving regional militaries and include buttressing forward-deployed forces, improving access, and cementing relations. Finally, IMET funds enable regional civilian and military personnel to study at American educational institutions. The introduction of U.S. doctrine and training to foreign leaders, as well as their personal contact with American military and civilian personnel, strengthens long-term relationships. What is more, instruction on topics

sought to minimize the risk to non-combatants. It thus tailored its military footprint ashore, adhered to well defined and rehearsed rules of engagement, and provided security for the last U.N. forces to board ships at Mogadishu on March 3.

Through the five pillars outlined above, CENTCOM is establishing peacetime relationships and infrastruc-

ture needed in a crisis and war. The functions embedded in these pillars reinforce the foundation of a theater strategy—military-to-military relations and regional access—that is essential to either deter conflict or to fight and win decisively in the Central Region.

Before and after hostilities commence, CENTCOM will exploit all sources of intelligence continuously to survey a potential enemy; to detect, track, and gain early warning of the

nations deter by convincing potential adversaries that the risks of using force are unacceptable

ture needed in a crisis and war. The functions embedded in these pillars reinforce the foundation of a theater strategy—military-to-military relations and regional access—that is essential to either deter conflict or to fight and win decisively in the Central Region.

Ingredients for Decisive Victory

Deterring conflict and preparing to fight are a continuum. Nations do not deter aggression by rattling empty scabbards or mouthing thinly disguised bluffs but rather by convincing potential adversaries that the risks of using force are unacceptable. This is achieved by designing, fielding, and exercising premier joint and combined forces, having the will to use them, and communicating that resolve to adversaries. While the U.S. military must be sufficiently versatile to deal with a full range of threats, it must focus on winning a high intensity war. The units, leaders, and individuals that can do this will also possess the skill and flexibility to handle other missions.

Efforts undertaken in accordance with the CENTCOM theater strategy reflect these precepts and characteristics. If called upon, the command expects forces to rapidly mobilize, deploy, link up with prepositioned weapons and supplies, and fight on arrival. In time of heightened tensions and crisis in the region, forces and supplies will be dispersed to minimize their vulnerability to enemy strikes; camouflage and deception will deny an enemy precise locations of key facilities and troop formations; forces will employ protective clothing, antidotes, and immunizations

use of ballistic missiles and weapons of mass destruction; and to assess battle damage. As our first forces arrive in theater, they will emplace a multi-layered missile defense founded on newly fielded lower- and upper-tier systems based on land and sea to safeguard critical facilities and friendly forces from ballistic missiles and weapons of mass destruction.

Should hostilities commence, U.S. forces and their allies could expect heightened lethality, extended ranges, and increased volume and precision from munitions to produce greater dispersion of fighting formations. In such circumstances, CENTCOM would use imaginative and innovative forms of maneuver, battle command, intelligence, fire support, and sustainment—on the ground, at sea, and in the air and space—cashing in on the complementary capabilities of all services, with systems linked electronically to both detect an enemy at extended ranges and achieve unprecedented operational synergism. Then vital enemy centers would be pounded by bombers, fighters, naval surface fire support, cruise missiles, Army tactical missile systems, attack helicopters, and special operations capabilities. As an enemy weakened under operational fires throughout the depth of the battlefield, the command would mount a fast-paced ground offensive. The cascading, continuous beating unleashed by these attacks would fix enemy forces in place, blind them, demoralize them, strip them of sustainment, deny them air and artillery support, paralyze their decisionmaking, and ultimately collapse their military formations and will to fight.

While this scenario reflects the modern American way of warfighting, U.S. forces cannot escape the fog and friction of war despite their most valiant efforts. Access to regional states might be complicated by the operational situation or political considerations. Attack aircraft might miss their targets. Carriers might be out of position in the first few days. Sand storms might delay air and ground units. Missile defenses might not be leak proof. Logistic shortfalls might slow down operations. In the final analysis, triumph in war will hinge as it always has on the skill, discipline, courage, and sacrifice of American servicemen and women. The CENTCOM theater strategy is designed to ensure that they possess the greatest possible resources and flexibility to succeed.

As the command looks to the future, it takes pride in its success in securing vital national interests in the Central Region and in its progress in realizing long-term goals. Time and again our people have delivered first-rate results, conducting combat operations, enforcing U.N. resolutions, delivering humanitarian relief, participating in combined exercises, establishing close relations with regional friends, negotiating basing agreements and host nation support, and creating processes and organizations needed to carry out the theater strategy in both peace and war.

Our mission and vision are clear. Success requires CENTCOM to be flexible and versatile. To meet challenges to our national interests, we are pursuing a five-pillar theater strategy to signal friends and foes alike that America is resolute in securing regional peace and stability now and into the next century.

JFQ

NOTES

¹ Office of the Assistant Secretary of Defense for International Security Affairs, *United States Security Strategy for the Middle East* (Washington: Government Printing Office, May 1995), p. 10.

² Ibid., pp. 15–16.

³ Robert H. Scales, *Certain Victory: The U.S. Army in the Gulf War* (Washington: Government Printing Office, 1993), pp. 41, 360–84.

The Middle East: Challenges Born of Success

By CHAS. W. FREEMAN, JR.



U.S. Army

Massed tanks in Saudi desert.

Like Caesar's Gaul, the Middle East can be divided in three parts, each presenting a unique challenge to U.S. interests and strategy. Each has its own history of active American involvement and all are undergoing significant change in the post-Cold War era, in part reflecting the successes of past and present policy. Ironically, these successes are already giving rise to new challenges to our interests and strategy.

The Maghreb and Southern Mediterranean

The westernmost part of the Middle East is the Maghreb—those north African countries on the southern

shore of the Mediterranean (Libya, Tunisia, Algeria, and Morocco) plus Mauritania. They have been of strategic concern since early in American history and were the scene of our first trans-Atlantic intervention. In 1815, provoked by repeated acts of piracy, Congress declared war on Algiers. The Navy and marines responded successfully there as well as in Tunis and Tripoli, assuring freedom of navigation in the Mediterranean and the safety of our citizens.

World War II underscored the geostrategic relationship between the Maghreb and Europe. America fought with Britain and France to secure the

southern littoral of the Mediterranean and to prepare for the reconquest of Western Europe. Crises in the eastern Mediterranean, Arabian Gulf, and central Africa during and after the Cold War were accompanied by repeated reminders of the importance of the Maghreb in military movements to the central and eastern Middle East as well as to sub-Saharan Africa.

Consistent with the past, U.S. strategic interests still are focused on maintaining stability, denying the Maghreb to an enemy that could threaten Europe's southern flank, suppressing wanton acts of lawlessness and terrorism, preserving military access and transit rights, and safeguarding our citizens. Strategic partnerships

with Morocco and Tunisia (and Egypt) have bolstered friendly governments, maintained access and transit rights, and constrained a radical regime in Libya while containing the political chaos in Algeria. These relationships have been the basis for a little-noted yet significant American policy success—prevention of a much worse situation than now exists in the Maghreb. U.S. influence there has rested so far, however, on extending significant economic and military support to Morocco and Tunisia. But the collapse of funding for aid is challenging all parties to find a new basis for cooperation in pursuit of shared strategic interests.

The spread of political Islamic movements in North Africa has increased strategic concern in Europe, especially in Spain, France, and Italy, that is reflected by NATO. The Atlantic Alliance is a forum in which U.S. policies toward the Maghreb can be coordinated with European partners. So far NATO, however, distracted by events in the former Yugoslavia and integrating Central and East Europe into a system of cooperative security, has not forged a plan to bolster moderates and contain extremism in the Maghreb. Until Europeans and Americans do so, they will be less than adequately prepared to deal with events on NATO's southern flanks.

The Levant and Eastern Mediterranean

At the center of the Middle East is the Levant, comprising countries that border the eastern Mediterranean—Egypt, Syria, Lebanon, Israel, and the other parts of the former British League of Nations Mandate in Palestine (Jordan and Israeli-occupied territories of the West Bank and Gaza). Prior to the Cold War, American involvement in the Levant was largely cultural, educational, and philanthropic. This has been altered by the end of British and French dominance, the destabilizing effects of wars over

the founding and expansion of Israel, and the concomitant extension of Soviet influence to Arab nationalist regimes in Egypt and Syria. For more than four decades the Levant has been a principal focus of U.S. security policy.

Over the course of forty-odd years, the Levant has been the scene of the most kaleidoscopic shifts in American relationships in the world. The

period have ranged from warm support and successful military intervention to block Egypt from overthrowing the Lebanese government in 1958 to the tragically unsuccessful intervention to back the withdrawal of foreign forces from Beirut in 1983. Nonintercourse with Beirut in the mid and late 1980s was followed by a modest flow of U.S. equipment to Lebanese forces in anticipation of a withdrawal by Syrian and Israeli forces as well as by Iranian irregulars. American financial and military support for Jordan, a fixture of Middle

East policy for over forty years, ended abruptly in 1990 after Jordan's de facto alignment with Iraq in the Gulf War. It then resumed (greatly reduced by U.S. budget constraints) as Jordan crafted a peace with Israel. Amman's only substantial "peace dividend" seems likely to be forgiveness of its debt by Washington.

U.S. relations with the Palestinians have undergone startling shifts in the last five decades. Sympathy and generous assistance to Palestinians displaced by Israel's violent establishment of its independence gave way to hostility and ostracism of Palestinian elites as they turned to terrorism in their struggle against Israel and its Western backers. America now carries on an active dialogue with the Palestine Liberation Organization (PLO) and leads international efforts to help Palestinians establish effective administration and reconstruct the economy in the territories being turned over to them by Israel.

This remarkable history of shifting alignments in the Levant was produced by the Arab-Israeli conflict interacting with the U.S.-Soviet Cold War rivalry. In the early days of the Cold War, the Soviet Union courted radical Arab nationalism and exploited Arab animosity toward Israel to garner influence in Arab capitals. Within a decade Moscow emerged as the dominant supplier of arms and ideological tutor of Israel's enemies. In response, the United States forged relations with regimes that were hostile to communism and Arab socialism, such as the conservative monarchies, while drawing steadily closer to Israel.

Israel's pioneering spirit, robust democracy, and military prowess

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against daunting odds earned the admiration of most Americans, while the fanaticism and terrorism practiced by Israel's most active enemies cost dispossessed Arabs whatever Western sympathy they might otherwise have gained. The commitment of American Jews and Christian fundamentalists to restored Jewish rule in the Holy Land reinforced U.S. relations with Israel. As the stridently anti-Israeli regimes in Nasser's Egypt, Syria, and Iraq moved into the Soviet orbit, the U.S.-Israeli relationship fell into in a Cold War context easily understood even by those Americans with no emotional attachment to the Jewish state.

By 1988, the apparent emergence of Israel as the primary enemy of the Soviet Union and its allies in the Middle East led the United States to formalize its defense commitments to Israel. A memorandum of agreement on strategic cooperation signed in that year committed the United States to guarantee Israel's security and assure its military supremacy over actual and potential enemies indefinitely. This agreement is the basic charter of America's defense relationship with Israel. The premises on which this charter was based, however, are now being rapidly overtaken by successes in U.S. and Israeli diplomacy that are reshaping the Levant. The end of the Cold War eliminated both the Soviet Union and all significant non-Middle Eastern sources of support for Arab hostility to Israel. Resolute and persistent American diplomacy helped foster the circumstances in which the PLO could embrace peace with a Jewish state that it once vowed to destroy. By doing so, the PLO has acknowledged that cooperation rather than confrontation is now the realistic path to Palestinian self-determination. Israel enjoys normal relations with Jordan as well as Egypt. Prospects for an eventual peace with Syria, followed by normalized relations with Lebanon and the end of Iranian influence there, seem increasingly sure.

Both Israeli and Arab extremists can be expected to sabotage the emerging peace between Israel and its neighbors. All evidence to date suggests,

however, that they are unlikely to succeed. Israel is already to some degree accepted by every Arab state and people as a legitimate part of the Middle East. For the first time since 1949, there is no credible threat to its survival as a prosperous democratic state. Eventual peace with Syria and Lebanon will lay a firm foundation for its political and economic integration into the broader region. This prospect looms as an historic victory for Israel and a signal diplomatic achievement for the United States.

As peace percolates into the Levant, however, U.S. strategic partnerships with both Israel and Egypt increasingly find themselves in need of new rationales for their sustainment. Support for Israel can no longer be justified in terms of countering the Soviet Union. The Arab threat to Israel is already greatly diminished. American involvement in securing Israel's borders with Syria, if this emerges as a condition of peace between the two as it did between Israel and Egypt, will assure continuing American involvement in Israel's defense. The threat to Israel will not disappear overnight, though it is likely to diminish in time. In this regard, the prospect of continued Iranian hostility toward Israel is worrisome but much less immediate than past threats. In short, threat analysis will shortly no longer provide a rationale for U.S. subsidies for Israeli defense at anything like previous levels. Similarly, sixteen years after Camp David, U.S. aid to Egypt is difficult to justify as necessary to consolidate peace between Israel and Egypt. The U.S.-Egyptian strategic partnership, like its Israeli counterpart, must find new foundations.

Crafting new underpinnings after an Arab-Israeli peace accord will not be easy but may prove less difficult than some imagine. Israel's emergence as an accepted part of the region should do away with the political sensitivities that have precluded U.S. inclusion of Israel in dealing with regional security issues involving Arab and Islamic states. Equipment and munitions prepositioned in Israel by U.S. European Command (EUCOM) may, for the first time, be usable in the Central Region. Greater security may persuade Israel to risk a more mutually beneficial

relationship with the United States, including combined air and ground exercises, a feature of all our other strategic partnerships. It will also make sense in time to realign the Unified Command Plan (UCP) to reflect Israel's emergence as an accepted part of the region in which geography has placed it.

Egypt's multi-faceted role as the demographic and cultural center of the Arab world, as an important Mediterranean and Red Sea country, and as one of Africa's few regional powers has yet to find full expression in its relations with America. Nor have Egyptian and U.S. forces created a firm basis for cooperating in areas of mutual concern. Egypt is situated between the Maghreb and Red Sea/Arabian Gulf subregions of the Middle East. Its contributions to the coalition victory over Iraq reflected longstanding concerns about the stability of the Arabian peninsula. It also has vital interests in the Horn of Africa, as operations in Somalia and action vis-à-vis Sudan have recently demonstrated. The stability of the area around Egypt is also of great concern to the United States. The downsizing of the Armed Forces may serve to make military partnership with Egypt, as with Israel, even more desirable than in the past.

The United States needs to open dialogue with both Israel and Egypt on mutually beneficial bases for security cooperation. Economic and military assistance are vital to both countries though increasingly unpopular in America. Without a mutually agreed basis for these relationships after a comprehensive Middle East peace is achieved, the U.S. public is likely to question the need for huge subventions to Israel and Egypt, not to mention new subsidies that Syria and Lebanon may demand as the price of peace. Israel and its Camp David peace partner Egypt already absorb the bulk of American economic assistance worldwide and nearly 100 percent of military assistance. The continued decline of U.S. assistance globally will accentuate the privileged position of Israel and Egypt. Even if these two states agreed that aid could be reduced to reflect diminished regional threats and

USS George Washington
heading north through
Suez Canal.



U.S. Navy (Todd Summerlin)

limit unhealthy reliance on subsidies from Washington, a new rationale will be required to justify continued aid at acceptable levels.

The Gulf and Red Sea

The easternmost subregion includes the countries bordering the Arabian/Persian Gulf and Red Sea (Iran, Iraq, Saudi Arabia, Kuwait, Bahrain, Qatar, United Arab Emirates, Oman, Yemen, and Sudan). American military involvement there dates from World War II. Access to and transit of the Gulf/Red Sea was essential to power projection into the China, India, and Southeast Asian theaters of war against Japan. The Suez Canal's closure due to conflict between Israel and Egypt brought major changes in the global shipping

industry, shifting traffic away from the canal. As the Cold War passed into history, however, Operations Desert Shield/Desert Storm again underscored the military importance of the Suez Canal and Red Sea corridor. By the late 1980s, moreover, tens of thousands of civil and military transports were trans-

growing dependence on Gulf oil greatly added to the strategic significance of the region

siting Egyptian and Arabian airspace annually between Europe and Asia. The Gulf War also dramatized the military importance of these routes.

Following World War II, the growing dependence of the American and global economies on Gulf oil greatly added to the strategic significance of

the region. This point came into painful relief when the Gulf states instituted an oil embargo to exact a price for massive U.S. assistance to Israel in the Arab-Israeli war of 1973. The cumulative costs to the American economy alone, in terms of inflation and lost economic growth, have never been reckoned but must be counted in the trillions of dollars.

As the traditional epicenter of Islam the Arabian peninsula has also become more important with the emergence of political Islam. The Saudi monarchy's irreproachably tolerant management of holy places in Mecca and Medina deprives extremists of a platform from which to preach *jihad* against the West. America and its European allies, as well as moderate Muslims everywhere, have a stake in the continuation of temperate rule over the holy places.

In sum, U.S. interests in the Arabian Gulf and Red Sea region have centered on oil, transit, and Islam for many years. These interests have found consistent expression in policies that sustain a balance of power and deny control of the region to the enemies of the industrialized democracies. From the late 1960s to the fall of the Shah of Iran in 1979, American strategy foresaw partnership with Iran as the means to deal with instability. Reliance on cooperation with Saudi Arabia, through the possible use of Saudi facilities, was seen as a further means of coping with an overt threat from the Soviet Union. Khomeini's Islamic revolution ended all possibility of cooperation with Iran and was followed by Moscow's decision to invade Afghanistan. The U.S.-Saudi partnership evolved as the two countries cooperated in providing crucial assistance to the Afghan mujahidiin.

Since World War II, the United States, with the cooperation of Bahrain, had maintained a small naval presence in the Gulf. With the British withdrawal in the mid-1960s, this force became the only permanent foreign presence and a key factor of regional stability. Washington responded to Moscow's flanking of the Gulf in Afghanistan by declaring a vital interest in strategic denial of outside powers (Carter Doctrine), prepositioning equipment and munitions in Oman and Somalia, and reorganizing its command structure by eventually establishing CENTCOM. This expansion of American presence was controversial among smaller Gulf states. Ironically in light of subsequent events, the most vociferous objections came from Kuwait.

The bloody, eight-year war of attrition between Iran and Iraq absorbed the energy of the Iranian revolution and effectively prevented its export to Shias in the Arabian peninsula. The Gulf Arabs perceived a vital interest in preventing Iranian victory over Iraq and in maintaining a balance of power between the two that could check their ambitions for regional hegemony. This was also an interest of the United States. Saudi Arabia, Kuwait, and other Gulf states offered substantial aid while American intelligence supported Iraq in staving off defeat by its more

populous neighbor. The abiding U.S. interest in the secure flow of Gulf oil, meanwhile, found expression in the naval escort of Kuwaiti tankers as the fighting extended to the waters and airspace over the Gulf.

The war ended in August 1988 with both sides exhausted although Iraq clearly emerged as the dominant regional military power. Gulf Arabs and the world should not have been surprised by Baghdad's decision two years later to take advantage of its un-

America can only adopt a policy of containing Iran and Iraq

matched military strength. Iraq's judgment that it could get away with annexing Kuwait was facilitated by the apparent loss of interest in the Gulf by the superpowers as the Cold War ended. The 1989-90 collapse of the Soviet empire and the Soviet Union itself freed Iraq of any need to defer to Moscow. Meanwhile, given the end of the threat to the Gulf, the Carter Doctrine seemed to lose its relevance. As Iraq blustered against Kuwait and the United Arab Emirates over the spring and summer of 1990, some in Washington were openly advocating the removal of the U.S. naval presence from the Gulf.

Baghdad's various miscalculations culminated in a failure to withdraw before Desert Storm ejected its forces from Kuwait and reduced them to a level which Iran might once again hope to balance and constrain. U.S. forces and the coalition they guided accomplished both their assigned objectives. In military terms it was a triumph of epic proportions, but its political result was less gratifying. As Basil Liddell Hart, among many other students of strategy, pointed out:

The object of war is to obtain a better peace. . . . It is essential to conduct war with constant regard to the peace you desire. . . . If you concentrate exclusively on victory, with no thought for the after-effect, you may be too exhausted to profit by the peace, while it is almost certain that the peace will be a bad one, containing the germs of another war.

The coalition was unable to set objectives beyond the lowest common denominator agreed to by consensus (liberation of Kuwait, reduction of Iraqi military potential). This left the victors without a vision of a post-war Gulf. With no strategy for war termination, the coalition made no effort to extract an Iraqi endorsement of peace terms or recognition of the political consequences of defeat. (The meeting on March 2, 1991 with Iraqi commanders at Safwan was a military-technical discussion and not a political negotiation. The United Nations was left to proclaim terms *ex post facto* and struggle to gain Iraqi compliance with them.) The failure to translate military humiliation into political disgrace for Saddam Hussein enabled him to avoid the personal consequences of the debacle. Without a vision for post-war Iraq, the coalition mounted a halting, ad hoc, and tragically ineffectual response to the Shia and Kurdish rebellions that followed the war. Saddam remained in power to plot revenge against his American and Gulf Arab enemies.

Meanwhile, the lack of an agreed concept for a post-war security structure to deter further Gulf conflict at reasonable cost meant that no such arrangement emerged. The absence of thorough regional plans for U.S. prepositioned war reserve materiel left this issue to piecemeal arrangements with individual members of the Gulf Cooperation Council (GCC). The conflict ended with Saudi Arabia financially exhausted and Kuwait preoccupied with the high expense of reconstruction. No arrangements to share the costs of security for Gulf Arabs have yet been worked out with them or with European and Asian allies. It is difficult to argue that our stunning military victory has been translated into a "better peace."

Saddam's continued leadership of Iraq, combined with the absence of dialogue with Iran, has precluded a strategy of balancing these two giants against each other. Such a tactic remains the preferred option for the Gulf Arabs. They cannot return to it, however, until Saddam's feud with them is ended by his removal from power. No plan for accelerating such a succession

in Baghdad seems to exist. As a result, America can only adopt a policy of simultaneously containing Iran and Iraq. Dual containment is much more expensive and fatiguing than balancing Iraq against Iran. It also yields the initiative to Baghdad (which can produce a war scare and hurried U.S. deployment to the Gulf whenever it desires) or Tehran (which can do likewise). The expense of unanticipated deployments to the Gulf can no longer be easily recouped from Saudi Arabia and the other states. The United States has, however, been very reluctant to confront the reality that it must increasingly bear the cost of our operations in the Gulf alone or—as may be infeasible in practice—arrange for allies outside the Gulf to help defray the expense. (After all, their interests in the resources and stability of the region that we are protecting are as great as our own.)

As long as Saddam is in power, Saudis and other Gulf Arabs are likely to grudgingly go along with dual containment. But as long as there is no credible GCC collective security structure, the threshold at which GCC members can summon American help will remain low. U.S. forces will thus be at the beck and call of both Baghdad and Tehran. While there is no concerted effort to establish broad interoperability among GCC forces as well as among U.S., Egyptian, and GCC forces, the effectiveness of our security partnerships will be reduced. The defense of the Gulf will thus continue to fall disproportionately on America. As long as Washington willingly shoulders most of the burden, our European and Asian allies will be more interested in exploiting arms and other markets than in sharing responsibility for defense of common interests. As long as there is no comprehensive GCC approach to prepositioning U.S. equipment and munitions, there will be a substantial risk that our forces may not be able to go into action in time and in sufficient mass to prevent the conquest or intimidation of a GCC member country by either Baghdad or Tehran.

Dealing with these dilemmas requires that the United States and the GCC reach agreement on a revised, comprehensive basis for defense cooperation. Such an agreement must then gain the support of the industrialized democracies. Both tasks have been seen as so difficult that neither has been attempted. What is certain, however, is that neither will be achieved, in whole or part, unless an effort is made. In the meantime, there is no obvious alternative to current policy in the Gulf despite the risks and expenses it entails.

Americans like to solve problems and move on. In foreign affairs, however, the resolution of one problem often gives rise to another. That is the case in the Middle East. The United States faces—or is about to face—a challenging new agenda in all three parts of that region.

Continued success in containing unrest in the Maghreb cannot be assumed. Circumstances have changed and the resources are no longer available to carry on as before. We need a concerted approach and division of labor with our European allies to bolster the security of our friends in the Maghreb, contain spillover from the political chaos in Algeria, and ensure that neither Algeria nor Libya emerges as a significant threat to Europe. NATO is the appropriate place to do this.

The prospect of increasingly normal relations between Israelis and Arabs brings a need to rethink, reformulate, and readjust our security relationship with both Israel and Egypt. The current pattern of U.S. relations has served all three parties well, but it is neither sustainable nor relevant to the challenges and opportunities that will be born of peace. America needs to work out mutually advantageous frameworks for defense cooperation suitable for changed circumstances with both Israel and Egypt. The beginning of dialogue with both should not be long delayed.

Finally, we cannot afford to rest on our laurels. The United States needs a more equitable and effective pattern of regional defense cooperation and deterrence both from and with the GCC. Nor should we continue maintaining Persian Gulf security essen-



DOD (R.D. Ward)

The author with
Jordan's JCS
Chairman.

tially alone, with minimal or no contributions from other industrialized nations whose interests are equally at risk and perhaps more so. A realistic discussion of dividing defense responsibility with the GCC and our European and Asian allies is both urgent and long overdue.

JFQ

The Growing Reach of RADICAL ISLAM



Egyptians with coalition forces in Saudi Arabia.

DOO

U.S. Navy (Ed Bailey)

By WILLIAM H. LEWIS

The United States faces complex challenges among those states which constitute the greater Middle East. From Morocco to Pakistan, much of the region is in the midst of an Islamic revival that reasserts religious values in contemporary politics. While Western scholars indicate that this does not necessarily portend a conflict between Islam and

Christianity, many fear that it could magnify the rift between Western ideals of parliamentary democracy and the authoritarian tenets of traditional Islam. This involves sensitive issues such as the role of religion in politics and the impact of American policies in areas where religious causes often justify political violence.

Compounding this challenge is the fact that Islamic revivalism does

not find active political expression everywhere. When it does, however, the exclusive goal is not to topple governments, though in some cases it is an effective means of opposing regimes with little tolerance for political expression. Egypt's long-established Islamic Brotherhood, for example, seeks participation in the electoral process as a legally constituted political party. Its strategy has been to provide health care and education in depressed areas of the country. More radical organizations,

such as the Armed Islamic Group in Algeria and Jihad guerrilla group in Egypt, employ intimidation, subversion, and terrorism to achieve their political ends. While most states in the region are avowedly Islamic, only a handful of governments adhere to Islamic (Sharia) law.

It would be a mistake for policy-makers to perceive Islamic militancy as a monolithic trend. Revivalism and militancy are diverse, and what is required is a grasp of the politico-religious level in the greater Middle East, the nature of the threats to existing institutions, and possible courses of action for the United States and those European nations which are most directly concerned.¹

Differing Perceptions

The growing Islamic revival raises important questions. Is this resurgence a by-product of a search for spiritual

Western values, they do not threaten our security. Saudi Arabia, whose government enforces the strictest interpretation of Islamic law in the Middle East, has been a partner of the United States for more than half a century. On the other hand, it is criticized by some Islamic groups for that relationship and its refusal to allow popular political participation.

Within the greater Middle East, two divergent strategies have evolved to cope with Islamic movements. One, adopted by secular states with single party or military regimes (such as Tunisia, Algeria, Syria, and Iraq), makes little distinction between mainstream and militant groups and deals harshly with both. In essence, such governments forbid religious organizations from participating in politics. The other strategy is to open involvement in the political life of the country to mainstream groups but not to extremists. Such participation compels movements to be pragmatic and separates moderates from militants. It requires a good political atmosphere, feasible prospects for economic progress, and shrewd management.

Devising strategies to deal with Islamic political groups is chancy at best. Not infrequently, governmental decisions are dictated by excesses, including violence by radical movements, which may or may not be connected to mainstream groups. For purposes of analysis, several criteria can help to identify the more radical groups, namely, goals, means, opportunities, and consequences:

■ **Goals**—The ostensible objective of each group is to counter omnipresent, insidious neo-colonialist influence emanating from the West; the ultimate goal is to replace the secular authority of the state.

■ **Means**—Against an implacable regime of disputed legitimacy, any means of opposition is viewed as legitimate. Operationally, violence is an appropriate way of upsetting the existing order, if need be by tearing the political system up by its roots.

■ **Opportunities**—The failure of governments to deal with social and economic difficulties is fertile ground for activists. In gross terms this includes issues of a population growth rate that has approached 3 percent per annum (Morocco, Algeria, and Egypt), 15–25 percent unemployment among youth (Algeria), and adverse import and debt ratios (Syria, Egypt, Lebanon, and Algeria).

■ **Consequences**—Radical strategies and violence disrupt internal power distribution and lead to military rule or a breakdown of authority. Extremists have no effective reform programs and almost invariably become authoritarian. The result is eroding public support. The implications of the latter for the region or the West could be substantial.

Country Profiles

Islamic revivalism has been a growing phenomenon in the greater Middle East since well before the Iranian revolution of 1979 which toppled the Pahlevi dynasty. Most specialists tend to mark its resurgence with the Israeli victory in the 1967 war. Out of defeat and Moscow's failure to intervene, disillusionment with Arab nationalism, Marxism, and Western materialism ineluctably led to a return by many Moslems to their traditions and values, including Islam. It produced a gulf between the politically active and their governments, with scenarios that conceptually fall into three identifiable stages:

■ movement from single-party control during a period of economic and social crisis toward pluralism, including participation of Islamic political parties

■ military intervention to establish order and terminate the participation of the latter

■ internal violence by opposition groups threatening the military-controlled regime which can lead to a failed state situation.

Algeria, Turkey, and Egypt bear special attention in this regard.

Algeria. The deterioration of state and society is readily apparent in Algeria where the crisis stems from a variety of factors. A sharp drop in oil prices, Algeria's principal export, occurred in the mid-1980s. In consequence, social-economic progress slowed as the population grew rapidly. The younger generation was alienated by pervasive



Coalition soldiers at prayer during Desert Storm.

has done in Jordan, thereby creating a constructive dialogue with mainstream Islamist politicians.

Current indications are that President Mubarak will not open the existing political system to any appreciable degree. In prospect is a continued lethargy by a regime populated by technocrats with limited capacity to reform the political system. The government prefers to focus on seditious activities of Islamic activists, pointing to the material and diplomatic support from Iran and Sudan. Both have been charged by the United States as prime actors in the area of state terrorism. Sudan has provided training facilities for Egyptian and Algerian insurgents while Iran has gained notoriety for military and financial aid to Hezbollah and Hamas, two organizations dedicated to failure of the current Arab-Israeli peace negotiations.

Neither Iran nor Sudan are paragons of a successful Islamic revolution. Both are pariah states which have failed to establish a positive record in resolving domestic political and economic difficulties. Under Hassan al-Turabi, Sudan has not managed to bring a wasteful, decades-old war with southerners to a successful conclusion and is trying to impose Islam by force. The Sudanese economy is virtually in receivership, barely able to stagger from debt crisis to chapter XI status. The opposition, however, is too weak to pose a credible threat. Iran is deeply embroiled in trouble with many of the country's senior mullahs who are distancing themselves from self-inflicted social and economic difficulties and from those in positions of power who are enriching themselves much like the Shah's clique. Iran is also in the throes of double-digit inflation, falling productivity, and mounting debt. In 1995 it experienced a number of industrial work stoppages and anti-government demonstrations. Sixteen years after its revolution, Iran faces a perilous time with the middle class, intellectuals, and bazaar merchants, who are skeptical of the government's policies and leadership. However, there is no sign of any organized opposition that could threaten to topple the regime.

corruption, incompetence, and self-centered actions of a single-party government. They protested in 1988, leading to more than 400 deaths at the hands of security forces. Single-party rule ended one year later and local and national elections were scheduled. To

Iran is the principal supporter of efforts to unseat governments tied to the West

the dismay of the ruling oligarchy, dominated by the military, the Islamic Salvation Front (FIS) emerged as a well organized political movement. It virtually swept out the oligarchy and threatened the military. Finally, in 1992 the military declared a state of emergency, outlawed FIS, and jailed 8,000 of its members. Since then there has been a growing, bloody insurgency with reprisals by government forces and the threat not only of a failed regime but a failed state.

Turkey. The potential difficulties facing Turkey are a product of its political heritage. After an initial period of gestation, Turkey turned to Europe and NATO as lodestars for future growth and military modernization. But neither Brussels nor the country's political parties have developed a strategy for securing these goals. There is reluctance with regard to Ankara's application for full European Union membership. Turkey's secular political

formations have been weak in leadership and racked by corruption. Military modernization goals have not been fully met. The government has sought to ease concerns over political and human rights. But the steps it has taken are unlikely to fully assuage many unhappy Turks and skeptical European Union members.

Sectarian anger has been increasing, reflected in March street riots in Istanbul and Ankara and a dramatic surge in the membership of the Welfare Party. The fragmented nature of Turkey's political culture, reflected by the electorate, could make this Islamic party the largest within parliament should they win one-third of the vote in national elections anticipated for 1996.

Egypt. Few secular Arab regimes have been as subtle as Egypt's in handling the Moslem Brotherhood. On coming to power in the wake of Anwar Sadat's assassination, Hosni Mubarak adopted a strategy of "gentle containment" of the Brotherhood while showing no mercy to Islamic Jihad and other bands seeking to overthrow the regime. Efforts by the government to redress these problems have had only limited success. Islamic groups continue to enjoy popular support for their socio-economic programs. Rather than neutralize all Islamic political and professional groups through police repression, a more productive strategy might involve some opening up of political processes, much as King Hussein

The Radical Network

Following the overthrow of the Iranian regime in 1978-79, most area specialists anticipated a wave of religiously based political upheavals. The only successful effort occurred ten years later in Sudan. In most instances, radicals have only played spoiler roles. In recent years, however, support networks have emerged in the form of thousands of militants from the Moslem world who fought alongside the Afghan mujahedeen and who have returned to Algeria, Sudan, and Lebanon. Recruits find access to training in Sudan and Lebanon, while Iran and some Saudi nationals offer financial aid. But this network does not amount to what can be called an Islamic "Comintern."

Iran is the principal supporter of efforts to reduce Western influence in the region, as well as to unseat governments closely tied to the West. Iranian involvement is also predicated on rejection of the legitimacy of the state of Israel, and therefore on public opposition to the Arab-Israel peace negotiations in progress since October 1991—a "flawed process" forced on Arab governments by the United States in collaboration with Israel. As a result, Tehran has maintained varying levels of support for Islamist groups such as Hizballah, Islamic Jihad, and Hamas.

The Islamic Republic of Iran has turned its proselytizing toward the small Arab states in the Gulf where substantial Shia populations form a potentially dissident underclass that seeks a greater political voice. Should Iranian-backed elements come to power in Bahrain, U.S. military access to facilities would probably be terminated—a boon to Tehran, which views the substantial presence in the Gulf area by the "great Satan" with considerable perturbation.

The crude though spreading network of radical Islamic groups in France, Spain, and Italy is of mounting concern to local governments. The nucleus of their recruits emanates from Algeria, Tunisia, and Morocco, all former French dependencies. Recent bombings of the Paris Metro have provoked further worry. Western security services have been placed on a heightened state of alert because of these

acts. Even the United States is not immune as the World Trade Center bombing in 1993 and recent airport terrorist alerts attest.

The United States has declared that it regards the Islamic revival as a natural outgrowth of economic and cultural reorientation, particularly in the wake of the Cold War.² Hence, the Clinton administration does not see Islam as the next "ism" which will confront the West or as a threat to international order. In the words of one senior American official:

In countries throughout the Middle East and North Africa, we... see groups seeking to reform their societies in keeping with Islamic ideals. There is considerable diversity in how these ideals are expressed. We detect no monolithic or coordinated international effort behind these movements. What we do see are believers living in different countries placing renewed emphasis on Islamic principles and governments according to Islamist political activity to varying degrees and in different ways.

It is also apparent that America opposes those who substitute religious and political confrontation for constructive engagement with the rest of the world.

Several questions emerge from the Algerian case. Was the Algerian government originally not aggressive enough in dealing with FIS or can political reform forestall extremism? Will Algeria be seen as the first of a series of potential dominoes in the region?

In the near term the Western allies will be limited in their ability to influence political forces in the Middle East. Events in Bosnia and elsewhere in the Balkans, the Arab-Israeli peace talks, and the Algerian civil war may shape the political landscape for years to come. But transformation of the region at the hands of radical Islamic groups is unlikely. At present, such movements are not ascendant. Few, if any, will come to power through constitutional means. The election route is barred to them in Morocco, Tunisia, and Egypt, which forbid political parties based on religion, region, or language. Saudi Arabia bans parties completely and, although political ferment

has been evident in recent years, the royal family will continue to exercise control so long as a majority of the princes remain united and supported by tribal groups.

The Islamic threat runs in cycles, however; and a critical factor will be the performance of existing ruling groups, the extent to which they tolerate political dissent, and how resolutely they tackle myriad economic and social ills. If they remain autocratic, morally bankrupt, and oblivious to the demands of the middle class and "lumpen proletariat," they will be vulnerable to challenges from ever present dissidents. The latter, disillusioned by Marxist theories and secular nationalism, have been compelled to turn to religion and its attendant traditions. But the primary inspiration for political action is the overthrow of power centers. Under duress, as recently seen, intervention by local security forces becomes ineluctable.

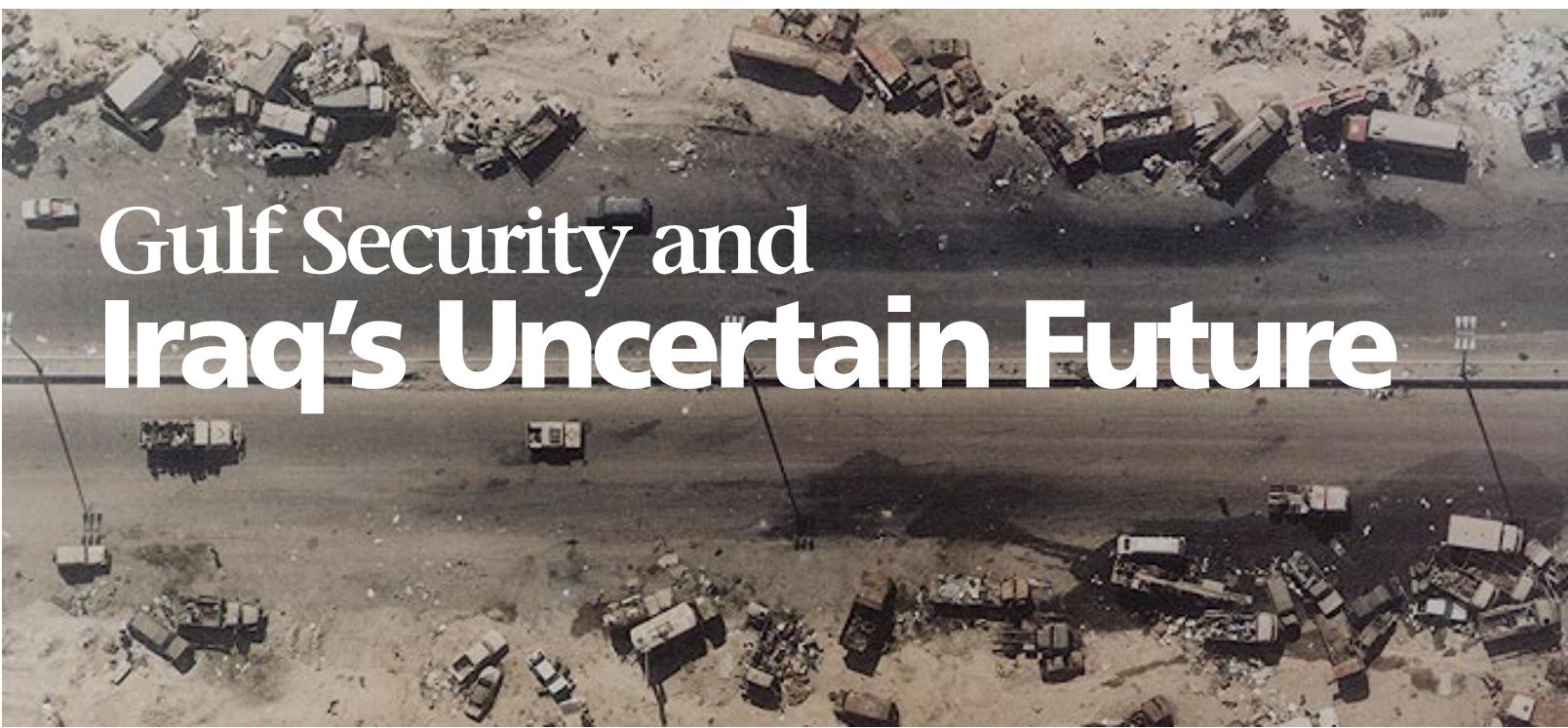
The task for the West is to develop strategies and contingency plans that deal not with the threat of Islam but rather with the problem of regime collapse and failed states.

JFQ

NOTES

¹ "Living with Islam," *The Economist*, vol. 334, no. 7906 (March 18, 1995), p. 13.

² Innumerable studies on the Islamic revival are available, although few evaluate the goals, organization, et al. of radical groups across the "greater Middle East." One analytical milestone is Oliver Roy, *The Failure of Political Islam* (Cambridge, Mass.: Harvard University Press, 1994). Other contributions include works by John Esposito, *The Islamic Threat: Myth or Reality?* (New York: Oxford University Press, 1992); James Piscatori, *Islam in a World of Nation-States* (New York: Cambridge University Press, 1986); Richard P. Mitchell, *The Society of the Moslem Brothers* (New York: Oxford University Press, 1969).



U.S. Navy

Gulf Security and Iraq's Uncertain Future

Highway of Doom.

By P H E B E M A R R

Iraq's uncertain future hangs like a pall over the Persian Gulf. Five years after sanctions were imposed, followed closely by a punishing war, the regime in Baghdad still clings to power. Moreover, despite Saddam Hussein's recent enforced cooperation with the United Nations, he has not complied with all relevant U.N. cease-fire resolutions. What lies ahead for Iraq? Is the current regime likely to survive? What difference does its survival or demise make to Gulf security? What challenges face the United States and the international community in dealing with Iraq in the near term as well as in the more distant future?

As part of the Gulf War cease-fire, the United Nations, under American leadership, placed unprecedented constraints on Iraq. They have been imposed using various instruments, sanctioned by Security Council resolutions, and implemented by U.S. and allied forces. They include:

- an austere sanctions regime which has deprived Iraq of oil revenues and all imports not related to sustenance and medical necessities

- a program to destroy Iraq's weapons of mass destruction (WMD) as well as intrusive monitoring to prevent future WMD production

- no fly zones in the north and south to limit Iraq's capacity for repressing its population

- rectification of Iraq's border with Kuwait and a monitored demilitarized border zone.

Saddam in a Box

These measures are designed to compel Iraq's compliance with a series of U.N. resolutions put in effect as part of the cease fire. However, they also serve to contain Baghdad's potential for aggression by limiting its military capacity and encouraging a change of regime.

Sanctions. The most important element of these constraints is sanctions. The oil embargo has reduced Iraq's foreign exchange income from a prewar \$12–15 billion to a current \$1 billion. Sanctions also restrict all imports except food and medical items. Although Iraq produces some of its own food and operates light to medium industry, sanctions have created shortages of equipment and

spare parts. Industrial production is half its prewar level and inflation is rampant. The dinar, valued at about \$3 before the war, now fluctuates at 800–1,000 dinars to the dollar and has recently reached 2,250. One indication of Iraq's declining economy is per capita income, currently reduced to a level of the late 1960s, before the rise in oil prices.

Weapons of Mass Destruction. Another critical constraint has been the inspection regime to locate, destroy, and bar production of WMD and ballistic missiles with a range over 150 kilometers. To this end, a U.N. monitoring system is being installed to assure that such systems are not reconstituted. The International Atomic Energy Agency (IAEA) and the U.N. Special Commission (UNSCOM) are charged with enforcing the regime. Thus far they have destroyed chemical warfare facilities, missiles and missile production factories, and other plants devoted to nuclear weapons production, although recent revelations may require reopening inspection of some WMD categories previously considered "closed." Biological weapons have not

been fully identified and eliminated. Thousands of documents must be analyzed and it must be determined whether any biological feed stock remains. Even if inspections result in the destruction of stocks and production facilities, without continuous intrusive monitoring Iraq could restart some programs, especially biological and chemical, since it possesses a large pool of scientists and technocrats with the expertise.

No Fly Zones. Another element of the containment policy is no fly zones. In the north of Iraq, the United States, Britain, and France conduct Provide Comfort, part of which comprises an air operation that prohibits Iraqi flights north of the 36th parallel. On the ground, a secure zone has been established to provide a safe haven for Kurds who fled from control by the central government after their failed rebellion in 1991. A military coordination committee comprised of American, British, French, and Turkish military representatives patrols the area and supervises the safety of the Kurds. In late 1991, Iraq withdrew its troops from much of the north to a perimeter from the Syrian to the Iranian borders. It no longer exercises sovereignty in this exclusion zone.

In 1992, a no fly zone was instituted south of the 32nd parallel to enable the coalition to monitor Iraqi noncompliance with U.N. prohibitions on repression of the Shia population. The no-fly zone also prevents the regime from using aircraft to support counterinsurgency operations. But Saddam did not withdraw his forces, and remains in control on the ground. After Iraq mobilized troops on the Kuwait border in October 1994, the United Nations passed resolution 949 which precludes Iraq from strengthening its forces in the south. According to Anglo-American interpretation, this means that units now north of the 32nd parallel, including Republican Guard units, may not move south of it. As a result, Iraqi sovereignty over the

south has been weakened but not eliminated. In addition, Operation Southern Watch provides further protection to Kuwait by giving the United States and the Gulf Cooperation Council (GCC) better warning should Saddam contemplate another attack.

Kuwait-Iraq Border. A U.N. commission has aligned and demarcated the Kuwait-Iraq border, with a 10-kilometer demilitarized zone on the Iraqi side and a 5-kilometer zone on the Kuwaiti side, monitored by the U.N. Iraq-Kuwait Observation Mission (UNIKOM).

Baghdad that Washington will continue to back constraints on the regime, weaken Saddam's hold on power. Assessments of his longevity were shortened with the defections in August 1995 of several members of his immediate family. Also relevant is Baghdad's isolation, sagging morale among the military, and growing opposition. All this evidence suggests a gradual narrowing of the regime's support base.

In the south the Shia are profoundly disaffected. Many dissidents remain in the marsh area while others

the United States may face difficult decisions on sanctions

These formidable restrictions have succeeded in compelling compliance with some, though not all, WMD provisions and recognition of the newly drawn border with Kuwait. Saddam has lost sovereignty over portions of Iraq; he has little income to revitalize his forces; international monitors constrain resuscitation of his WMD program; and sanctions are sapping the economy and ability of the regime to reward its power base.

Looking ahead the question is not the efficacy of these instruments to compel compliance with resolutions or to contain aggression, but rather how long they can last, whether they can bring about a change in the regime, and what might happen if they are lifted or weakened.

At some future point, the United States may face difficult decisions on the sanctions if, however gradually and reluctantly, Saddam Hussein has been compelled to adhere to key WMD resolutions. Ultimately only one of two outcomes is possible in Iraq, either loosening sanctions with the current regime or a change of leadership. It is on long-term scenarios that analysts are now beginning to focus.

A Post-Saddam Regime

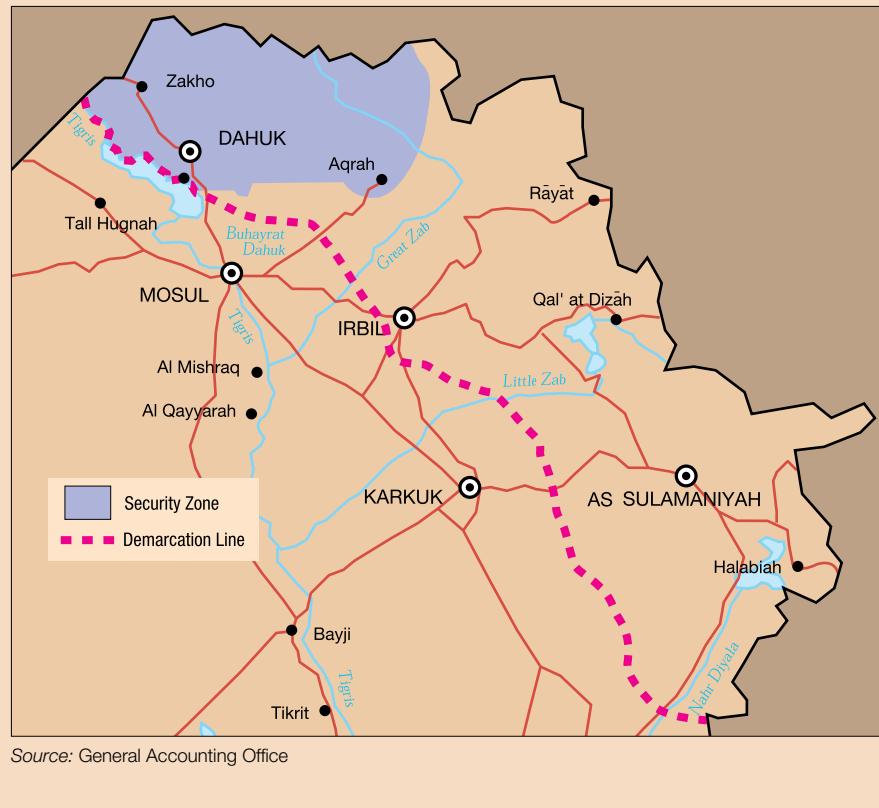
As time passes the potential for a leadership change slowly improves, but it is by no means certain. Sanctions, and more critically the growing sense in

stage cross-border raids from Iran. Saddam's control, despite massive draining of the marshes to remove a refuge for these dissidents, remains weak in the area.

In the north the government has lost control of much of the Kurdish area. In the exclusion zone, two Kurdish parties and their militias are in charge, while an umbrella opposition group, the Iraq National Congress, operates with impunity. Unfortunately, early experience of Kurdish self-government has collapsed in party infighting, spoiling chances for a cohesive opposition movement. While the opposition in the north is unable to unseat the regime, it runs extensive information and intelligence operations against the government and acts as a base for desertions from Iraq.

More significant is growing opposition from the center of the country, especially from the military and the Ba'th Party who Saddam relies on for support. In the past two years, there have been numerous reports of attempted coups or plots against the regime, particularly from powerful tribal groups with members in high ranks of the regular army and Republican Guard. Last year, the brutal execution of a dissident general from a powerful Dulaim tribe sparked rebellion in his home town, Ramadi, where provincial officials were killed and public buildings were burned to the ground. This was followed by the forced resignations of two relatives of Saddam, the ministers of interior and defense. The dramatic defection in August 1995 of Husain and Saddam Kamil (with

Northern Security Zone and De Facto Military Demarcation Line



their wives, Saddam's daughters), both of whom held key posts in the inner ruling circle, exposed serious cracks in the regime.

Meanwhile the economic situation is deteriorating, disaffecting the

in the near term it is more likely that Saddam will cling to power

hard-hit middle class on which the regime counts for passive support. Maldistribution of wealth is acute, with high salaries and perks such as cars and housing going to Saddam's supporters while middle class workers lose their savings and must take multiple jobs to make ends meet.

However, while sanctions are weakening Saddam's power base, his security system is still intact, making an attempt to remove him highly dangerous and difficult. Aside from popular fear of the regime's ruthless retribu-

tion and the extraordinary task of penetrating the security apparatus, a major constraint lies in the fear of chaos that could follow Saddam's departure. Since the defections, Saddam has undertaken significant political damage control.

He has reduced the power of his immediate family, strengthened ties with the Ba'th Party and the military, and "won" an election for president (he was the only candidate). His ouster is speculative. Although it cannot be ruled out, it cannot be assumed.

Iraq without Sanctions

In the near term it is more likely that Saddam will cling to power, attempting to weaken the alliance arrayed against him to a point where he achieves an easing if not a removal of sanctions. While this process has been delayed, if he continues to accede to

the provisions of resolution 687 on WMD, and UNSCOM issues a satisfactory report, a majority in the Security Council might vote to ease sanctions. Without action to forestall this eventuality, the United States will have to use its veto if it wants the oil embargo maintained.

Since sanctions must be reviewed every two months, continual use of the veto could raise tension with our allies as well as the cost of maintaining alliance cohesion on other issues such as sanctions on Libya and Iran over which there is already disagreement. If the veto is used, more leakage on sanctions could be expected as well as more challenges from Iraq. Alternatively, the United States and its allies could revise the sanctions regime to permit some oil exports to ease the humanitarian crisis, while maintaining a high degree of control over Iraq's expenditure of its oil income. The Security Council passed resolution 986 (which was rejected by Saddam), allowing for a limited amount of oil to be exported over fixed periods with controls on income expenditure. Even if the embargo is eased, other restrictions (such as on imports) could be used to exert control. Given international and especially American distrust of Saddam, full restoration of Iraq's control over its oil is unlikely. A post-sanctions Iraq, even if it came into being, might be only a marginal improvement for the Iraqi people.

Regional Security

The removal of Saddam Hussein has unpredictable implications for the future of the Gulf. Who would succeed him? What support would a new regime have? What agenda would it adopt? The most likely replacement is thought to be someone from the circle of power, either a military man or a Ba'thist. Under this scenario a new regime would have a similar political orientation, the core of which would be a strong, modern Iraq, with the ability to project its power and influence. But such a regime might be only slightly better than the present one. Those who subscribe to this outcome argue that such a regime would be pragmatic. Bankrupt and isolated, it



Maritime interdiction team boarding Iraqi vessel.

Iraqi prisoners of war.

would be forced to accommodate domestic groups to maintain power and to relax tensions to have sanctions lifted. This would be the most favorable outcome.

Unfortunately, removing the regime in Baghdad would likely be followed by instability. If not curbed, this could be a slippery slope, with the potential for ethnic and sectarian violence and erosion of centralized control. A collapse of the government would allow neighbors such as Iran, Syria, and Turkey to increase their influence over Iraq. Severe instability could spill over into Gulf countries such as Kuwait, Saudi Arabia, and Bahrain, which may have to cope with increased Shia activity from southern Iraq, supported by Iran. Turkey could also face more instability among the Kurds along its borders.

The end result of the second outcome is more predictable but more threatening. If Saddam gets more oil income through a removal or easing of sanctions, his political tenure is more assured. His track record on policy is clear and unlikely to fundamentally change. He will use some of his wealth to buy off domestic discontent, but the lion's share will go to supporters, especially family, and to the security system which will continue to repress the population. The military will be built up slowly but surely, and Saddam's ability to cheat on WMD will grow. He might even get fissile material clandestinely for a nuclear weapon if vigilance is relaxed. He is only 58 and could remain in power for another decade or more.

If sanctions are eased and oil begins to flow, Saddam's behavior may be more difficult to monitor and control. Iraq has oil reserves of well over 100 billion barrels, second only to

Saudi Arabia, with a potential to export 6 million barrels per day. If the growth of Iraqi exports is unchecked, some European and Asian nations will beat a path to its door for trade. Baghdad could be in a position to intimidate and challenge GCC states in a decade. Saddam's survival would present the United States with the task of maintaining a long-term policy of containment and close monitoring of Iraq's WMD.

Force Posture

It is against a potential land threat from Iraq that a robust U.S. force posture is being put in place in the Gulf. The challenge posed by Saddam Hussein in October 1994 illustrated once again the need for swift and decisive deterrent capacity. In the wake of Desert

U.S. Navy (John Bouvier)

Iraqi Compliance with U.N. Resolutions

no. 833	★ <i>accept newly demarcated border with Kuwait</i>	♦ <i>accepted</i>
no. 707	★ <i>complete disclosure of all WMD programs</i>	♦ <i>partially fulfilled</i>
no. 687	<ul style="list-style-type: none"> ★ <i>destroy all chemical, biological, and ballistic missiles over 150 kilometers and research/manufacturing facilities</i> ★ <i>not acquire or develop nuclear weapons</i> ★ <i>accept on-site inspection, verification, and monitoring for nuclear, biological, and nuclear missile facilities</i> ★ <i>repatriate Kuwaiti/third country nationals</i> ★ <i>return property stolen from Kuwait</i> ★ <i>end participation in/support for international terrorism</i> ★ <i>establish assurance of "peaceful intentions"</i> 	<ul style="list-style-type: none"> ♦ <i>partially fulfilled</i> ♦ <i>nuclear facilities dismantled</i> ♦ <i>inspection system in place/partially functioning</i> ♦ <i>over 600 Kuwaitis still missing</i> ♦ <i>all property not yet returned</i> ♦ <i>unfulfilled</i> ♦ <i>unfulfilled</i>
no. 688	★ <i>end repression of Iraqi citizens/allow access to humanitarian organizations</i>	♦ <i>unfulfilled</i>
no. 705	★ <i>pay compensation up to 30 percent of oil revenues to victims of Kuwaiti occupation</i>	♦ <i>requires lifting oil embargo</i>

Storm, America has unprecedented cooperation with GCC states, including defense agreements with five members and close relations with the sixth, Saudi Arabia. The agreements provide a framework for prepositioning equipment, access to facilities, combined exercises, and an ability to return rapidly in a crisis. In addition to increased air and naval assets, combined exercises

where radical Islam is spreading anti-Western sentiment, these states also must worry about the visibility of a larger Western military presence.

Meanwhile, it is not only a re-armed Iraq that presents a danger, but Iran as well. The threat from Iran is unlikely to be a ground attack, as it is from Iraq, but naval interdiction in the Gulf and possible use of missiles. Iran has been busy militarizing Abu Musa, an island jointly claimed by Iran and the United

Arab Emirates. Subversion from Iran is a constant threat for GCC countries, some with substantial Shia populations.

Both of these dangers make vigilance essential for the foreseeable future. In the long term, it would be advisable to include Iran and Iraq in a Gulf security framework, which would lessen the need for a large American presence, but given the regimes in these countries, that seems a long way off. The potential for gradual change in Iran appears more likely than in Iraq, although that is also an unknown and in any event will take some time. Unless there is a regime change in Iraq, little long-term behavior change can be expected.

We must be prepared for several scenarios. While a change of regime in Iraq would be preferable, Washington has no international mandate and few instruments to engineer that from outside. Such an outcome must rest with those in Iraq most capable of bringing it about. But the United States can offer an external environment favorable to change. While continuing pressure for compliance with U.N. resolutions, it can hold out prospects for an improved international climate—a gradual end to isolation and easing of sanctions—if a change at the helm in Baghdad gives way to a more acceptable government that adheres to both international norms and respect for its own population. The challenge here will be to help Iraq through a transitional period should a change occur.

If the regime stays in place, the United States and the West will have to devise a policy that contains Saddam Hussein but provides the population with economic relief. Efforts to open up the country and allow contact between its many middle class professionals and the outside world could pay dividends in the long term. It is contact with this segment of the population that will provide the best avenue for producing the alternative leaders to those currently in power.

combined exercises enable the United States to rotate combat units through the region

with regional forces enable the United States to rotate Army and Marine combat units through the region periodically without permanent bases.

However, increased security is a burden for GCC states who must bear the expense. Gulf operations in October 1994 may have reached \$1 billion on top of the \$37 billion Gulf states spent on Desert Storm. GCC states no longer have the deep financial pockets they once boasted. Saudi Arabia has one of the world's largest debts, and lavish subsidies to its people are being curtailed. The steep costs of the war have now been exacerbated by the decline of oil prices from highs in the 1970s and 1980s. Defense expenditures, however necessary, are unwelcome. In a region

IRAN

AND THE

"Great Satan"

By MARK J. ROBERTS

America continues to represent the "great Satan" to the Islamic Republic of Iran. President Hashemi Rafsanjani charged that the United States has been poisoned by Zionist propaganda. One Ayatollah, in blaming America for bloodshed around the world, said that, "this satanic superpower will never be successful against the Islamic Republic."¹ The United States is Iran's all-purpose demon.

U.S. policymakers must resist the temptation to reciprocate by depicting Iran as its own demon. If it were not for terrorism, Iran's infamy could be reduced to inflated rhetoric, unrealistic designs, and high levels of defense spending. A workable strategy should be developed toward the Iranian regime that is not based on competitive demonization.

Iran is only one of our many security concerns in the greater Middle East. Continuous state sponsorship of terrorism led the Clinton administration to issue an executive order in May 1995 to ban trade and investment with

Iran. While this affected some American businesses, the economic impact on Tehran may be more lasting. Yet Iran has largely avoided blame for supporting acts of terrorism, despite its continued involvement in planning and conducting such violence.

In addition, internal problems threaten to fracture Iran. Broad-based support for the regime has diminished to a level where it faces a breakdown of its politico-religious legitimacy. Economic and political crises have resulted in urban rioting and calls for autonomy from centralized control. This threatens Iran's stability and emphasizes the fact that while it exports ter-

the Iranian desire to play the dominant role in Central Asia clashes with Turkish intentions

rorism, that is not the answer to the aspirations of the Islamic world.

Iran's ability to engage the United States can be indirect and handled through diplomacy, sabre rattling, and in the worst case force. But Iran will endeavor to impede American policy by rhetoric, posturing, and perhaps terrorism. To counteract this, the United States must maintain its presence in the Gulf, engage in confidence building measures with regional allies,

demonstrate the resolve to engage potential aggressors, and simultaneously be open to rapprochement with Iran.

The Regional Dimension

Tehran's perspective on security was changed little by the outcome of the Gulf War, the breakup of the Soviet Union, and the advent of a new world order. Historically, its interests have been fixed between the Persian Gulf and Central Asia, where a lack of borders offered freedom of movement. The demise of the Soviet empire enabled Iran to establish relations with Azerbaijan, Armenia, Turkmenistan, Kazakhstan, Kyrgyzstan, Tajikistan, and Uzbekistan.

The Iranian desire to play the dominant role in Central Asia clashes with Turkish intentions. In addition, despite a claim of regional solidarity,² Iran's ambition of manipulating a counterpart to the Arab League is not attainable absent regional homogeneity and common purpose. Moreover, Khomeinism is unpopular among Central Asian elites with Soviet-style technocratic educations.

Since the ascension of Reza Shah to the Peacock Throne in 1925 and through the regime of the Islamic Republic, Iran's goal of becoming the hegemonic power in the Gulf has been a constant feature of its security policies. Before the revolution, Iran had the largest, most powerful forces in the region and perhaps the greater

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Middle East. However, the military suffered from shortages of spares, lack of technical expertise, and an inability to operate equipment without foreign assistance.

The revolutionary purges and subsequent eight-year struggle with Iraq depleted the edge in manpower and technology formerly enjoyed by the military. Since the mullahs believe that military power is basic to shaping the strategic environment, Iran seeks a military-technological advantage over

of an attack on aviation or maritime routes has kept Iran under international observation.

Current U.S. policy toward Iran stems from Clinton administration concern over Tehran's conventional and nuclear programs, including the acquisition of submarines and ballistic missiles. Iranian criticism of our policy of "dual containment" grudgingly acknowledges American presence in the region but views it as a step backward. As described by National Security Advis-

The Nuclear Club

Iran has an aggressive overt and covert nuclear and ballistic missile program with the intent of acquiring nuclear weapons. China has provided its favorite client in the region with both a small reactor and a separator for producing radioactive isotopes as well as a promise of more advanced technology. Despite claims to the contrary, there is no such thing as dual-use technology transfer to Iran. Unless constantly inspected, dual-use technology will find a military use whenever it suits the recipient, and all the nuclear, chemical, biological, and missile technology that advances Iran's acquisition of nuclear weapons will be applied to that end.

Interest in nuclear power on the part of Tehran is hard to explain unless linked to a plan to acquire nuclear weapons. Nuclear power plants do not make sense for Iran, which has the world's second largest reserves of natural gas—fuel that is not easy to sell and is thus suitable for domestic consumption. Generating power from natural gas requires a low capital investment, whereas nuclear plants would cost billions of dollars in foreign exchange, capital which Iran does not have.

Iran may be trying to acquire nuclear weapons from the former Soviet republics of Central Asia. There are also indications that Russian military personnel in Iran provide guidance to Tehran's nuclear program. According to former Director of Central Intelligence James Woolsey, Iran is attempting to buy fully fabricated nuclear weapons. After the disagreement which surfaced at the May 1995 summit over Russia's sale of a light water reactor to Iran, Moscow broke ranks with Washington. Russia does not share concern over Tehran's pursuit of nuclear weaponry.

While entering the nuclear club opens a new era for a country, Iran's interests are manifold. Many of its neighbors either have or are rumored to have nuclear weapons—Israel, Iraq, Russia, Ukraine, Belarus, Kazakhstan, Pakistan, and India. Iran's quest for nuclear weapons, however, is motivated by political rather than security reasons, its drive for status being a greater



DOD

Iranian Kilo-class
Attack Submarine.

its neighbors, especially Iraq, somewhat heedless of the consequences of this policy.

The desire for regional primacy—and a growing arsenal—could fuel one of Iran's enduring ambitions—control of the Strait of Hormuz and, along with it, the Persian Gulf and Gulf of Oman. Through these waters transit more than 90 percent of all Iranian government revenues, including all of the country's petroleum. Of great concern are its Hawk missiles, SA-6 batteries, 155- and 122-mm artillery, missile boats, Silkworm missiles, and mines near vital choke points. The possibility

sor Anthony Lake, dual containment seeks to work with regional allies to "maintain a favorable balance without depending on either Iraq or Iran" to "counter the hostility of both Baghdad and Tehran."³

For Iran the goal of being predominant in the Gulf received new impetus with the defeat of Saddam Hussein and the acquisition of over 100 combat aircraft from Iraq. It should be noted that the purchase was comprised of hardware only—no spare parts, technical manuals, or maintenance.

incentive than any particular threat. Nuclear acquisition thus is seen by Iran as a means of achieving compara-

U.S. planning must ensure that the Iranian military remains a peripheral concern

ble status with some of its neighbors while gaining military dominance vis-à-vis the Gulf states. On another level, nuclear acquisition would exhibit self-reliance and technological progress while turning attention from internal social and economic difficulties.

Domestic Upheaval

Empty mosques across the country reveal a pervasive distrust of the ruling mullahs, whose credibility and power are waning. After years spent painting the West, and America in particular, as scapegoats, the clerical fever pitch has diminished to a point where religious radicals are finding it difficult to maintain their legitimacy. It is ironic that the stature of the mullahs—the guardians of a theocracy—is tarnished in this way.

Thus far, Tehran's nuclear program has been determined but not very advanced. However, Iranian possession of nuclear weapons would also fundamentally alter the framework within which we approach Gulf security. Washington will keep abreast of developments to proactively direct the course of events or respond appropriately. At the very least, American strategists must prepare for a possible Iranian nuclear threat and its ramifications.

Currently, Iran is engaged in an ambitious conventional weapons program. In the next few years, it will purchase from 250 to 350 advanced combat aircraft, 320 surface-to-surface missiles, 2,000 SAM launchers, and 2-4 Kilo class submarines. Though these numbers are daunting, Iran's ability to procure spare parts, maintain and operate equipment, field it for prolonged periods, and employ it in an integrated fashion are suspect, calling into question the utility of these acquisitions. While a full-scale confrontation with

the United States is not a likely option, Iranian military power can constitute a threat to all Gulf states except Iraq.

U.S. diplomacy and military planning must therefore ensure that the Iranian military remains a peripheral concern.

The intensity of this arms buildup is in part a reaction to the long embargo that followed the Islamic revolution. As a result, it disregards the fact that Tehran can ill afford the weapons because of dire economic conditions, social and religious dilemmas, and overburdened infrastructure. Seen in this light, undue attention has been placed on conventional arms purchases since Iran is no more than a nuisance, lacking the ability for power projection and sustained military operations.

In addition, the build-up will in all probability not be able to overcome the chronic lack of spares that has plagued the country, rendering many of its combat systems inoperable. More than an arms buildup, Iran's internal difficulties pose the greater threat to regional stability because they may serve as a pretext for the mullahs to undertake a campaign of terrorism to divert attention. High inflation and a migration of professionals have damaged prospects for economic, social, and educational renewal. Moreover, domestic upheaval could spill over into neighboring countries.

Iran's security interests have remained constant since the revolution and might be furthered by limited regional integration (although probably not within the framework of an alliance) in a bid for acceptance into the community of nations. Cooperation with its Arab neighbors and America to maintain the security of Gulf waters, albeit unlikely, is a valuable contribution that Iran could make toward regional stability. The United States should seize

any opportunity to achieve this, although there may have to be superficial concessions to appease some Iranian face-saving interests.

A dialogue with Iran might convince other Islamic movements such as those in Egypt and Algeria that the United States is not hostile to Islam. If there are talks, Washington and Tehran will have to deal with the Islamic Republic's position that its political legitimacy is based on rejecting America and



Iranian C-130.

U.S. Navy

its values totally. Iranian support for terrorism must also end without preconditions. If such obstacles are surmounted, the door could open for dialogue and perhaps lead in due course to mutual recognition.

JFQ

NOTES

¹ "Senior Ayatollah Warns of U.S. 'Plots,'" *Tehran IRNA* in English, Foreign Broadcast Information Service, 1644 GMT, 4 Nov 94 (LD0411192394) November 7, 1994, p. 66.

² "Editorial Says Talks with U.S. Ruled Out," *Tehran RESALAT* in Persian, Foreign Broadcast Information Service, 1 Nov 94 (NC1111211794), November 16, 1994, p. 69.

³ Anthony Lake, "Confronting Backlash States," *Foreign Affairs*, vol. 73, no. 2 (March/April 1994), pp. 48-52.

Turkey's Role in the Greater Middle East

By JED C. SNYDER

For much of the last five decades, Turkey has been regarded by many European observers as a strategic ally but not as a front line NATO member. Its status in the Alliance—as a developing Islamic state with a strong Ottoman tradition that is nonetheless linked to the West—tended more often than not to isolate Turkey politically and also raised questions about its identity. What Ankara perceived as its crucial role in Western security and defense matters seemed to many Turks to be discounted. Arguments within the U.S. policy community asserting that Turkey's role as a Western partner was undervalued resonated only rarely in Europe.

This marginalization was reinforced by twin images of Turkey: one of a warlike people that for six centuries ruthlessly ruled an empire which encroached on Europe under a series of despotic Ottoman sultans; the other of a romanticized realm with harems, mosques, and dervishes. Neither depiction provides an insight into the Turkey of today.

After more than seven decades of secularization and modernization, Turkey is a paradox for those who wonder how this politically pluralistic, secular nation can comfortably fit in the Western community while also retaining a mosaic of Middle Eastern, European, and Asian influences.

Like its alliance partners, Turkey moved into the post-Cold War era unprepared for the new world order. It is

undergoing a reorientation in an environment characterized by the collapse of the Soviet Union and Warsaw Pact, conflict in the Balkans (vexed by an historic rivalry with Greece), newly independent states in Central Asia, instability in the Caucasus (Georgia and Azerbaijan) and the North Caucasus (Chechnya), a growing role in the Gulf (complicated by strained relations with Iraq and the Islamic regime in Iran), and Kurdish separatism fueled by a campaign of terror.

As Ankara's external threat perception evolves, its domestic situation has deteriorated under economic stagnation, shifting demographics, the transition from a state-controlled economy, Islam as a political force, sanctions against Iraq, failure to gain membership in the European Union, and declining aid from the United

States and Europe. Turkey does not face serious external threats, but several factors contribute to a sense among observers that it could become a security liability rather than an asset because of Cyprus, Greece, Bosnia, radical Islam, and alienation from Europe.

Finally, amidst cross-currents, Turkey must decide what models of cultural, political, and social order to pursue. This dilemma is sharpened by its Ottoman and Kemalist past, the growing weakness of its political parties, and an inability to persuade Europe of its economic credentials.

National Stability and Identity

The legacy of Turkey's Ottoman heritage remains enduring both in Turkey and in Western Europe. Although the Ottoman Empire expired with World War I, many, particularly in Europe, anticipate a newly expansionist Turkey, disenchanted with the West, turning inwards toward its historic roots in Central Asia and the Middle East.

Many have questioned Turkish membership in the European Union (EU) on grounds that its ultimate orientation may be non-European or even anti-European. To Turks as well as some in Western Europe, however, this hostility toward its EU application is fueled by both European unemployment and resentment over the large number of Turkish guest workers, particularly in Germany. This is a symptom of an increasingly rightist approach to immigration, which is most acutely expressed in national, regional, and local elections in France as well as Germany.

Turkey's Spheres of Interest and Influence



Anger over what Turks see as an anti-Islamic bias—reinforced by the West's unwillingness to give Bosnia's Moslems arms—could turn their forceful nationalism in a negative direction. Unrelenting Western criticism of Turkey adds to the rancor and bolsters ultra-nationalist elements and radical Islamic parties, which are gaining greater attention, support, and political legitimacy.

political Islam has stimulated debate over how much pluralism Turkey can withstand

Among the reservations about Turkey's admission to the community of Western nations is doubt over its commitment to liberal democracy. For example, there is concern that intolerance of minorities (particularly the

Kurds) and charges of human rights abuses could bar it from EU membership and brand it a renegade. Prime Minister Tansu Ciller shepherded constitutional reforms through parliament to expand political freedom in Turkey, but further action is needed.

The overall fragility of Turkey's political system and its susceptibility to fringe groups raise questions about its inherent stability. Of immediate concern is the potential that support for the secular system may fall under the weight—though limited today—of militant Islamic groups.

The role of religion and extent to which it can be used as a political tool should not be dismissed, but neither should it be exaggerated. Resurgent political Islam has advanced by electoral victories of religious parties in two

major cities, Ankara and Istanbul. This in turn has stimulated widened debate over how much political pluralism Turkey can withstand.

The Kurds

There is another threat to Turkey's stability, unrelated to radical Islam though affected by it. Civilian authorities and the military continue to fight Kurdish separatism, particularly the Kurdistan Workers Party (PKK), which is sworn to use terror in creating an independent state from Kurdish communities in Turkey, Syria, Iraq, and Iran. The total Kurdish population in the area is estimated at 20 million. The community in Turkey is the largest, some 12–14 million.

In the southeast, where most Turkish Kurds live, the PKK objective is to carve out part of Anatolia as a state. Accordingly, Ankara declared an emergency in ten southeastern provinces and mounted local counterinsurgency operations, deploying 150,000 men. The government estimates that there are 15,000 PKK guerrillas with a reserve

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of 45,000, and though the figures vary widely, Ankara is spending \$5–7 billion annually on antiterrorist operations. The current defense budget is estimated at \$5.1 billion (4.1 percent of GDP).

The PKK threat has opened a debate among Turkish intellectuals and parliamentarians over restrictions on political participation. At issue is whether terrorist restrictions, aimed at separatists, should be relaxed. President Suleyman Demirel, who recognizes the fragility of the political system (having been twice removed as prime minister by military coups in the 1970s and 1980s), voiced concern that if political restrictions on ethnic groups are removed, people who "have lived together would then be unable to keep doing so and Turkey would become ungovernable."

The emerging debate has ramifications beyond constitutional interpretation or civil liberties. Much of southeastern Turkey has been the scene of an 11-year guerrilla war where the military has been unable to quell the separatist movement led by the PKK and its sympathizers. Continued insurrection threatens to destabilize the country and is costing the government dearly, financially and politically. Lifting or modifying the anti-terror laws could lead the PKK to intensify its efforts, possibly forcing military intervention and the declaration of martial law to control the region. This is the worst case scenario but is not implausible.

While PKK terrorism is an immediate internal security threat, longer-term and more serious social and political issues arise from the movement of Kurdish refugees from the southeast to cities (fleeing villages destroyed by the military), and the gradual integration of Kurds into mainstream society. An increasing Kurdish awareness and political agenda have evolved. Urban migration and an assertive Kurdish nationalism have fueled political radicalism, contributing to support for Islamic parties, including the Refah which has increased its following in major cities.

The government must weigh the severity of the PKK threat and the internal challenges of growing Kurdish nationalism against Western sympathy for the Kurds and Europe's insistence that its treatment of oppressed minori-

ties and human rights record must improve if Turkey is to join the European Union or even the Customs Union, the first step toward full membership. Increasingly, many Turks regard this precondition as prohibitively expensive.

The Military Role

Below the surface of political debate is a growing concern that the armed forces—generally regarded as the institutional guardian of Turkish democracy—may feel compelled to intervene if it appears that the country is polarized by radicals or faces chaos. On three occasions (including two coups) the military has stepped in to restore order and then returned to its barracks. Western fears that, under social and economic pressure, Turkey could regress and adopt the despotic ways of its Ottoman past continue to be raised among those who remain uncertain about the military's political proclivities.

Reinforced by a tradition of universal service, the military is the leading vehicle for social mobility and source of expertise for national leadership. Hence, it enjoys great prestige and wide support from the public at large. It earned a reputation for professionalism, nonpartisanship, and respect of civilian control, an image implanted in 1908 when a revolutionary movement of officers which included Mustafa Kemal (Ataturk) known as the Young Turks forced the Sultan to restore a constitution that led to the founding of the Republic of Turkey.

Encircled Ally

When the Berlin Wall fell many analysts thought the event would favor the West. Turkey was among the first NATO members to challenge that assessment as premature at best. Seen from Ankara's position at the crossroads of Europe, the Middle East, and Asia, the security environment is more tenuous now than at any time since World War II.

Turkey feels encircled by "New World Order" conflicts and sees little sympathy by its Western partners for its own position, beginning with its internal situation, which has regional implications.

Insurgents are aided by Iraqi Kurds from camps in Iraq, adjacent to Turkey's southeastern border. The United States, Britain, and France protect this enclave in northern Iraq under Provide Comfort. In Turkish eyes the operation contributes to PKK terrorism by infiltrating guerrillas into the extreme southeastern part of the country, where 4–5 million Kurds dwell. The no-fly zone is maintained by assets deployed at Incirlik Air Base which complicates a difficult accord whereby the Air Force operates under the limited terms of the U.S.-Turkish Bilateral Defense and Cooperation Agreement. If Ankara denied the use of Incirlik, Provide Comfort might come to an abrupt halt with an adverse impact on its relations with Washington. While the Turkish prime minister favors continued access to the base for non-NATO operations, the general staff is believed to be less enthusiastic and to have lobbied against it. Finally, the parliament votes periodically to reapprove the operation, which requires greater American arm-twisting each time the issue comes up.

The breakup of Yugoslavia spawned a string of newly liberated Balkan states whose future is uncertain. This situation affects Turkey directly, as part of its population is Bosnian by origin. For 500 years Bosnia and Herzegovina were provinces of the Ottoman Empire. Also, many Turks identify with Balkan Moslems who number an estimated 10 million. Furthermore, Turkey was the principal architect of the Black Sea Economic Cooperation Zone, founded in Istanbul in 1992 with an important Balkan component. In many ways, the success of this initiative rests on settling the present crisis. Ankara has favored lifting the U.N. arms embargo on the Bosnian Moslems and is reportedly funneling aid to Bosnia.

To the northeast, there is a low-level war between Armenia and Azerbaijan over the enclave of Nagorno-Karabakh. Another northeastern neighbor, Georgia, continues to simmer after a series of civil insurrections which brought Russian intervention. Competing paramilitary groups support strong regional rivalries, which may yet result in Georgia's fragmentation.



Russian military interest in Georgia, which has strong historic roots, has been rekindled. Moscow, in many respects retaining its Cold War hostility toward Turkey, has signed a deal with Tbilisi to base large numbers of Russian forces in the country, including areas close to Turkey's border. Further, in an effort to bolster its military

relations between Greece and Turkey have soured over maritime and air boundaries

presence in the aftermath of the Georgian and Chechyan campaigns, the Russian high command has signaled its intent to abandon the limitations placed on deploying forces on its flanks under the Conventional Armed Forces in Europe (CFE) Treaty, thus al-

tering the regional military balance in the Caucasus in a manner that the Turks find threatening. While Moscow's military incompetence in Chechnya could be considered reassuring in Ankara, the long history of Russo-Turkish military rivalry has left a strong impression.

To the west, relations between Greece and Turkey have again soured to such an extent that NATO finds it almost impossible to hold useful exercises in the Aegean because of disagreements over maritime and air jurisdiction boundaries. To the south, the age-old dispute between Greek and Turkish Cypriots endures, while Turkey, which backs a self-declared Turkish republic in northern Cyprus, is under renewed pressure from Europe to withdraw military forces from the island after more than two decades. To the east, across the Caspian Sea, the

Tankers and AWACS aircraft at Incirlik.

Turkic-speaking states of Central Asia, which because of cultural and linguistic affinity with Turkey held out the promise of close relations with Ankara, have spurned Turkish advances.

In sum, Turkey has seen its neighborhood decline substantially over the last five years as Western doubts regarding the country's acceptability for EU membership have grown. To Turks, however, its credentials as a modern economy are not the obstacle to membership or acceptance in the Western community. Ankara believes that delays in considering its application for the Customs Union are attributable in part to Europe's determination to punish Turkey for its incursion into northern Iraq in March 1995 to strike at PKK camps from which cross-border terrorist acts were being mounted. The operation—the country's largest in fifty years—involved 35,000 troops and was

designed to stop PKK infiltration. The general staff had claimed that 2,500-3,000 guerrillas operated from northern Iraq, which shares a 220-kilometer border with Turkey.

While Turkish relations with the United States have been warmer than with Europe, Ankara has on occasion found Washington less than sympathetic. Turkey expected a political and financial windfall from its role in the Gulf War. Its bases, particularly Incirlik, provided vital support to coalition forces. But this expectation was thwarted when Congress restructured foreign military financing in FY93, eliminating grants and converting military aid for both Turkey and Greece from grants to concessional loans, and reducing total aid to Turkey by 10 percent. Subsequently loans were adjusted to market rather than concessional rates and cut again. In addition, some of this aid has been withheld for various reasons, including concern over human rights abuses, Cyprus, and the blockade of Armenia. Finally, Turkey balks at the congressional practice of enforcing a 7:10 ratio in military aid for Greece and Turkey.

Combined, these measures have constrained military modernization and Turkey still fields some equipment of Korean War vintage. The accumulated resentment of the officer corps (which plays an influential role in politics) and political leaders is likely to complicate U.S. efforts to renew bilateral defense arrangements which are the bedrock of the U.S.-Turkish military relationship.

Geopolitical Orientation

Despite occasional periods of strained relations with its partners, NATO membership has been a major source of Turkish pride. Political and military leaders are quick to remind American and European analysts that at the height of the Cold War, Turkey's contributions to NATO dwarfed those of most members (including the United States) when measured as a percentage of GNP devoted to defense or in terms of ground forces committed to the Alliance.



Harbor river border between Turkey and Iraq.

Combat Camera Imagery (Efrain Gonzalez)

While Turkey is among NATO's greatest boosters, it views the debate over whether and how to expand the Alliance with some dismay. Ankara is concerned that expansion eastward to include former Warsaw Pact nations will dilute the NATO article 5 guarantee—an attack against one will be regarded as an attack against all members—and by extension would reduce the credibility of the NATO umbrella. Also, many Turks remain unconvinced that Russian policy has been transformed from its Soviet antecedent. Turkey is suspicious of Russian motives in the Caucasus and Balkans, where there is strong mutual enmity. Russian suspicions of Turkey's motivations in Central Asia and Azerbaijan (opposing Moscow's ally, Armenia) are earnestly felt as well.

It seems clear that the NATO center of gravity is shifting from Central Europe toward the Mediterranean. Western concerns over German security, the nucleus of NATO defensive strategy, have been reduced since the Cold War. Ground and air forces deployed in Central and Northern Europe are down by half from the early 1980s. Yet the Turks see little evidence that the Alliance has adjusted its strategy to reflect a larger role for its southern allies, whose focus on the Soviet threat was always less immediate than

that which preoccupied Germany and the Nordic nations.

Turks have long argued that among their contributions to NATO was a unique ability to act as a bridge to the Middle East as epitomized by its membership in the Baghdad Pact and the Central Treaty Organization. Ankara has traditionally argued that Turkey can protect NATO interests in a region normally regarded as alien and distant to the West. Yet when Turkey has offered assistance, as in the Gulf War, it has sometimes alienated its Arab cousins.

Much is made of Turkey's potential role in Central Asia. While the Turks have explored opportunities there, Central Asian states will be most attracted to nations that can offer large capital investment projects and longer-term alternatives to dependence on Russian largesse. Investment along Russia's southwestern flank which includes Azerbaijan is expanding, but it is relatively low, in large part because of Turkey's unfortunate economy (which shrank by 5-6 percent last year as inflation reached 150 percent), and because of internal difficulties that have distracted politicians.

In the long run, Turkey's role in the Caucasus may actually be greater than in Central Asia, since it can resolve the issue of transporting oil from the Caspian Sea region to markets in

Europe and Asia. Here, Ankara is likely to compete with Tehran, which has aggressively pursued Central Asia's leaders, particularly in Turkmenistan, in aid of reaching long-term arrangements for oil exports. While Turkey offers an attractive option to those who fear Iran's ideological course and political meddling abroad, the long-term economic benefits of dealing with Iran may be more promising.

Turkey's potential transit route for Caspian oil is likely to revive animosities between Turks and Russians. In

Moscow found it hard to acquiesce over the Bosphorus and Dardanelles

500 years they have fought more than a dozen conflicts, many over the straits linking the Mediterranean and Black Seas. The Turkish Straits, dividing Europe and Asia, have been a source of friction since the Montreux Convention of 1936 which governs transit through the straits. Moscow found it hard to acquiesce in Turkish sovereignty over the Bosphorus and Dardanelles and has never accepted wartime control of this vital passage by Ankara. Moscow has often challenged Turkey's jurisdiction, most dramatically by sending the carrier *Kiev* through the straits.

More recently, Ankara and Moscow found themselves on opposing sides of an increasingly vital issue, the volume of tanker traffic through the straits. More than 40,000 ships annually make it one of the most clogged routes in the world. Half of the foreign flagged vessels are Russian, carrying some 20 billion gallons of oil. Turkey fears oil spills or explosions from the 200,000-ton supertankers, which would endanger the 11 million residents of nearby Istanbul.

While Russia acknowledges that environmental dangers are real, it suspects that Turkey's true concern centers on its plan to build a pipeline from the fields of Kazakhstan and Turkmenistan in Central Asia and Azerbaijan in the Caucasus to Turkish ports on the Mediterranean. Moscow perceives

Ankara as a competitor in this potentially lucrative market. The Russian preference is to ship oil from the Russian terminals at Novorossiysk on the Black Sea, which would require greater access for Russian tankers to the Turkish Straits.

Competition over Caspian oil also has a political dimension which infuriates Ankara. For several years, Turkey had been negotiating an oil agreement with Azerbaijan. Before it could be signed, however, the pro-Turkish Azeri President Abulfaz Elchibey was ousted and replaced by a Soviet-era KGB official. Turkey suspects Russian complicity in toppling Elchibey, whose views were decidedly anti-Russian and who occasionally incited the Azeris of Iran to break with Tehran. Moscow was not eager to address the potential consequences of Iran's break-up, which threatened to trigger similar disturbances among Moslem populations on Russia's periphery.

Besides competition with Moscow, Tehran has signed agreements with Turkmenistan which could erode Ankara's leverage with other potentially oil-rich states in the region. Tehran has also announced support for the Novorossiysk option and may back a Russian plan to build pipelines. This fuels Ankara's concern that a Moscow-Tehran entente could doom prospects for Ankara to profit from Caspian oil trade. Moreover, Tehran's covert programs to develop weapons of mass destruction with Russian assistance only reinforce Turkey's sense of encirclement.

If Turkey prevails in limiting traffic through the straits, Moscow's influence in both Central Asia and the Caucasus would diminish as hard currency from oil transit agreements was lost. This would come in the wake of Russia's failure to triumph in a confrontation with a ragtag Chechenyan army and to prevail in its struggle with Georgia.

Russia is the only great power in the region and thus Turkey must ultimately accommodate Moscow or stay clear of those issues that might bring the two into conflict.

Turkey's discomfort with the post-Cold War security order is shared with

virtually all of its Western and non-Western neighbors. This transition from the period of global bipolar competition presents opportunities and risks. Turks understand that many opportunities in a multipolar world could place them in conflict with nations that are also seeking greater security. Turkey's dilemma differs from most, however, in that the Cold War's end has further clouded rather than clarified its identity among Western and non-Western nations.

During the Cold War, Western allies (including Turkey) could accept the ambiguities of the alliance because of coalition imperatives. But these ambiguities have become a source of tension, loosening alliance cohesion. Turkey's search for a new center of gravity and a distinct regional role is frustrated by its estrangement from Europe, which may create a greater dependency on the United States at a time when Washington is disinclined to encourage it.

The unique status of Turkey in NATO and close relationship with the United States can be seen as an asset, but it also complicates its relations with nations outside the Western Alliance. Further, estrangement from its more traditional Arab and Islamic friends could isolate it from the Middle East and in the process reduce its effectiveness as a bridge to increasingly vital regions on NATO's periphery. Few of the security choices faced by Turkey are mutually exclusive. The challenge will be to navigate a course to broaden its relations with Europe, Russia, the Middle East, and Asia, while retaining the ability to move between Western security partners and those outside that system. Turkey must weigh its choices carefully.

JFQ

Regional Implications of NBC PROLIFERATION

By ROBERT G. JOSEPH

The proliferation of nuclear, biological, and chemical (NBC) weapons, and of increasingly capable ballistic and cruise missiles as delivery systems of choice, represents a central threat to U.S. security interests and the use of force as an instrument of U.S. national strategy. In response to this growing threat, the United States is pursuing a two-track approach. The first, designed to *prevent* proliferation, consists of bolstering traditional non-proliferation efforts—such as arms control, export controls, and security assistance and assurances—to dissuade any potential proliferator from pursuing NBC and missile programs. The second track, referred to as counterproliferation, consists of defense initiatives across a broad range of activities—from doctrine to training and leadership development to acquisition—designed to *protect* against the strategic and tactical consequences of proliferation should prevention fail.

Greater Middle East: Proliferation Profile



Source: Institute for National Strategic Studies, *Strategic Assessment 1995*.

Non-proliferation objectives have long been given high priority by the United States, which has taken the lead in establishing international legal norms against the possession and the use of NBC weapons. The 1972 Biological Weapons Convention and as yet unratified 1992 Chemical Weapons Convention are expressions of this effort. The Clinton administration's emphasis on indefinite extension of the Nuclear Non-Proliferation Treaty (NPT) as well as its advocacy of a comprehensive test ban are more recent indications of the desire to prevent proliferation through arms control. Paralleling these regimes, the United States has long sought to promote multilateral export controls for sensitive technologies and materials. The Nuclear Suppliers Group, Australia Group, and Missile Technology Control Regime are prime examples of this effort. The ongoing U.S. attempt to transform the Coordinating Committee on Multilateral Export Controls (COCOM) into a non-proliferation export control organization is another example.

While a large majority of the members of the international community has supported the creation of these legal norms and abides by them, a growing number of states have rejected or manipulated the norms and associated safeguards to gain access to proscribed technologies. For example, like North Korea and Iraq before it, Iran's formal adherence to NPT—while actively pursuing nuclear weapons—is a cynical display of contempt for these legal norms and its ability to circumvent international controls. Iran's membership in good standing in the treaty regime, which permits it to take advantage of access to technologies applicable to weapons, clearly demonstrates the limitations of arms control approaches. Similarly, the willingness of suppliers to provide this technology, in this case Russia, demonstrates the limits of export controls.

In part as a consequence, a significant paradox is now evident in the security environment: while the United States has renounced possession of offensive biological and chemical weapons and is fundamentally reducing its nuclear stockpile and the role of

nuclear weapons in its post-Cold War defense posture, a number of hostile states are actively pursuing NBC weapons. In fact, as evidenced by the diffusion of dual-use technologies and the wide-scale use of chemical weapons in the Iran-Iraq war and other conflicts, barriers to possessing and using these weapons are actually eroding. Recent Iraqi admissions provide further evidence which supports this conclusion. U.N. officials have acquired documents revealing that, while the United States was deploying forces to the Gulf in the autumn of 1990, Iraq began to fill bombs and Scud warheads with chemical and biological agents for use against coalition forces as well as Israeli and Saudi cities. The documents also show that, following its invasion of Kuwait, Iraq embarked on a new crash effort to produce one or two nuclear bombs. This effort, which was in addition to a long-standing program to enrich uranium for nuclear weapons, included a plan to recover by April 1991 weapons-grade uranium from safeguarded radioactive fuel supplied by France for the Osirak reactor.

The utility and effects of NBC weapons differ by the type of weapon and scale of their use. While nuclear weapons have certain attributes that

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Logistic choke points are vulnerable targets.

make them particularly useful tools for political intimidation, chemical and especially biological weapons pose

in the greater Middle East nearly half the countries possess or are developing NBC weapons and missiles

other challenges. When compared to nuclear weapons, both are relatively easy and cheap to acquire, and because the requisite support facilities lack unique signatures, they are far less vulnerable to attack. Moreover, post-1960s advances in biotechnology make the use of biological weapons against targets such as airfields and ports more feasible. Further, high-lethality, multiple-delivery modes (including covert), and limited ability to detect—and thus defend against—biological weapons have serious implications for deterrence and warfighting.

Perhaps the most troubling implication from a U.S. political-military perspective is that, of those states pursuing NBC and missile programs, a significant number pose direct threats to

stability in vital regions where the United States has long-standing security commitments and the forward

presence of its forces. In the greater Middle East, an area of special concern, nearly half the countries already possess or are developing NBC weapons and missiles.

Of these, Iran, Iraq, and Libya stand out as the near-term threats to the United States. Given the dynamics of the region, other countries such as Syria could quickly join these three states.

The Threat to the Area

Often considered rogue states, Iran, Iraq, and Libya have objectives which are inimical to U.S. interests and therefore see the United States as a serious obstacle to achieving their goals. All appear to regard NBC weapons and missiles as valuable instruments for pursuing their regional political and military ambitions and for overcoming the conventional superiority that the United States and potential coalition

partners can command in theater. In this context, NBC weapons and missiles are prized as effective tools for coercion against neighboring states and for deterrence (for example, to deter the United States from intervening in the region). Moreover, as demonstrated by the extensive use of chemicals and ballistic missiles in the Iran-Iraq war and Iraq's preparations for the use of biological weapons in the Gulf War, these weapons are also viewed as having great strategic and tactical value.

Iran is embarked on a significant arms buildup across the board, including aggressive NBC programs. Although Iran signed the Chemical Weapons Convention, it subsequently expanded and upgraded its chemical warfare program. According to open source estimates, its chemical warfare program can produce hundreds of tons of agents annually, primarily choking and blister agents. A biological weapons program dating back to the early 1980s has advanced to the point where it probably has produced biological agents and weaponized a small quantity of those agents. Iran's nuclear program is expected to take eight to ten years to produce its own weapons, perhaps five if



U.S. Marine Corps (J.R. Tricote)

Scud remains in the Persian Gulf.
U.S. Air Force (Pedro Ybanez)

Tehran gets foreign assistance. Given the Iraqi experience, where it is clear that the program was much further advanced than assessed by the intelligence community, and given the certainty that Iran will receive outside help, the time required to acquire a crude nuclear weapons capability will likely be less than official estimates. In its pursuit of ballistic missiles, Iran has acquired the extended-range Scud C from North Korea and is expected to receive the 1000-plus kilometer No Dong-1 from the same source.

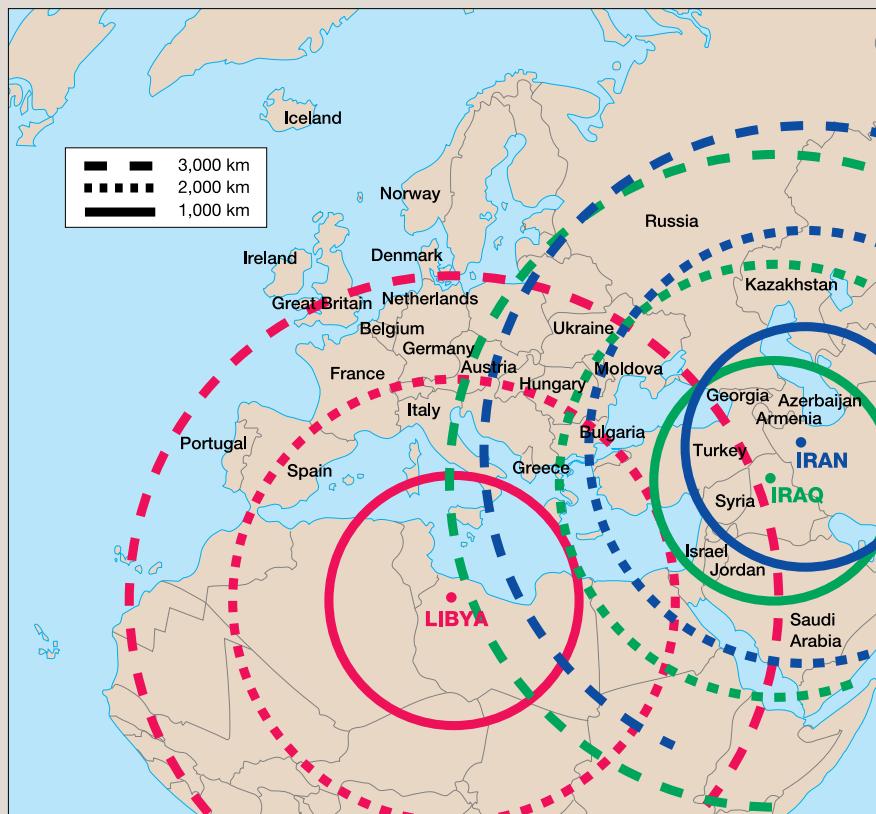
Iraq's NBC and missile programs suffered a major setback with its defeat in Desert Storm. Many key facilities were heavily damaged or destroyed from the air and others rendered inoperable through continuous intrusive inspections. Nevertheless, despite efforts by onsite U.N. personnel, Iraq has avoided detection and destruction of critical elements of its NBC infrastructure, as well as existing stockpiles of chemical and biological weapons and missiles. As a result of its costly but successful efforts, it can resume its programs soon after inspectors leave. For

example, Baghdad has retained a significant amount of chemical weapons production equipment and is assessed to have preserved stockpiles of chemical agents and munitions. Some chemical weapons production could be resumed in weeks. Iraq's offensive biological program, which produced thousands of gallons of anthrax bacteria and botulism toxin, is of the greatest concern. While recently admitting to stockpiling massive amounts of biological agents which it claims to have destroyed, neither war nor inspections have completely degraded Iraq's capability. Production of biological agents, if not ongoing, could begin at any time. Similarly, Iraq still retains the expertise and technological base to resume its uranium enrichment program, including machine tools and centrifuge designs. Even though its nuclear program has clearly been disrupted, Iraq's continued deception and

evasion on all related issues indicate its intention to resume the quest for nuclear weapons once freed from international sanctions. Finally, in large measure because the U.N. cease-fire agreement permits Baghdad to develop, test, and produce missiles of ranges up to 150 kilometers, Iraq has held onto missile support equipment and propellant that can be used for longer-range missiles. In fact, since the Gulf War, Iraqi agents have successfully acquired critical missile components from abroad in violation of the U.N. sanctions.

Libya, though possessing less indigenous expertise than Iran or Iraq, has actively sought both chemical weapons and ballistic missiles and may be pursuing biological and nuclear weapons. Tripoli has invested heavily in building chemical weapons production plants at Rabta and Tarhunah and is assessed to have a weapons stockpile of at least 100 tons of agents, including mustard and nerve gas. In addition to its 300-kilometer range Scud missiles, Libya has reportedly arranged to buy extended-range Scud-Cs and perhaps No Dong from North Korea. While its biological and nuclear weapons programs are currently assessed to be in the R&D phase, Tripoli is seeking to transform its biological research program to produce weaponized agents. Libya operates a small nuclear research facility and is alleged to be recruiting Russian scientists to help establish a nuclear weapons program. Experience—the launch of ballistic missiles against Lampadusa and the use of chemical weapons in Chad—reveals that the Libyan leadership sees these weapons as politically and militarily useful. Qadhafi's expressed desire to be able to strike the United States with long-range missiles is further indication.

Threat Ranges



Source: Ballistic Missile Defense Organization.

Regional Deterrence

The possession of NBC weapons and missiles by states like Iran, Iraq, and Libya raises the risks of engaging in the area and complicates coalition building, undermines deterrence based on conventional superiority, and threatens the U.S. ability to conduct operations. Consequently, it is essen-

for deterrence to succeed, the United States must have the capability and will to prevail in an NBC environment

tial to rethink how such weapons could be used against the United States or coalition partners in a regional context and what must be done to deter and defend against them.

The use or threat of use of NBC weapons against U.S. and coalition forces in the greater Middle East, unless limited to small-scale tactical employment such as chemical weapons on the battlefield, could have major strategic and tactical repercussions for accomplishing missions and objectives, affecting deployment into theater, sustaining forces, and conducting combat operations. For example, large concentrations of troops and equipment present a major vulnerability to NBC attack. In a region like the Gulf with relatively few airfields and ports, business as usual is a formula for disaster.

Any NBC use would almost certainly fundamentally alter the political nature of the conflict as well. Even the threat of use could lead to pressures (such as driving wedges in the coali-

tion) as well as reassessments of coalition objectives and resolve. If Iraq had possessed nuclear weapons and ballistic missiles able to strike Western Europe, for example, forming and maintaining a Desert Storm-type coalition would have been even more difficult, if not altogether problematic.

It is important to remember that deterrence works in two directions. Just as the United States will seek to deter an adversary from using NBC weapons, an enemy will seek to use the possession of these weapons to deter American and coalition forces from intervening and bringing to bear overwhelming conventional superiority. Failing to deter the United States, an NBC-armed enemy could decide to employ these weapons to drive up U.S. and allied casualties for political and military impact. In order not to be deterred, the United States must demonstrate—to a potential enemy and to itself—that using NBC weapons will not produce political and military benefits that outweigh the associated risks.

For deterrence to succeed, the United States must have—and be perceived to have—the capability and will to prevail in an NBC environment and retaliate against an enemy, holding at risk assets of value that can be attacked and destroyed if an enemy undertakes the action which was to have been deterred. Given the importance of forging and maintaining coalitions in regional conflicts, U.S. deterrent posture must also be credible to prospective partners. To be credible, deterrence must demonstrate consistency of purpose as well as determination over the long haul. The U.S. reputation for resolve among allies and potential enemies alike is affected by its actions over time and across the spectrum of security policy.

Deterrence remains the first line of defense against NBC weapons, and the basic elements of deterrence must be maintained and strengthened. However, traditional approaches to deterring NBC use in an unstable region such as the greater Middle East are inherently uncertain. Many of the conditions that contributed to deterrence in

the Cold War are not present—for example, mutual understandings of the implications of NBC use and effective communication. In the final analysis, a deterrent strategy requires knowledge of the strategic personality of one's adversary, to include a cognizance of the region, the culture, the military forces, and the regime itself.

For these reasons, the United States must reexamine the requirements for, and assumptions of, deterrence in a regional context. In the CENTCOM area of interest this means strengthening the U.S. capability to retaliate conventionally so that the consequences of contemplated aggression are clear to leaders such as Saddam Hussein. Moreover, it requires finding more effective ways to communicate resolve and capabilities through declaratory policy and private channels. The credibility of U.S. deterrent forces can also be enhanced through such measures as deployments and exercises.

In this regard, it may be necessary to review the formulations of the various U.S. negative security assurances in the context of regional deterrence, keeping in mind that American superiority in conventional force cannot be expected in every case to deter war or use of NBC weapons after war has begun. For example, declaring that the United States will not use nuclear weapons against non-nuclear parties to the NPT may be perceived by states such as Iran to exempt them from possible nuclear retaliation if chemical or biological weapons are employed against American forces. This would clearly undercut the value of the U.S. nuclear deterrent which, if Iraqi leaders are to be believed, was decisive in Baghdad's decision not to employ chemical and biological weapons. Iraq's concern was based on a direct American warning that it would suffer catastrophic consequences if it used chemical or biological weapons against the coalition. Iraq interpreted this to mean nuclear retaliation. Thus, even though the post-Cold War role of nuclear weapons in U.S. defense policy is not precisely defined, nuclear weapons remain the ultimate sanction and a vital element of

deterring NBC use. For this reason, it is necessary to resist further attempts to delegitimize U.S. possession of nuclear weapons.

Defense Against NBC

When one considers deterring Iran's mullahs or a Qadhafi or Hussein, it is clear that deterrence could fail. Because of the inherent complexities of deterrence and the problematic nature of its success, it is necessary to plan for its failure. As previously indicated, should this occur and NBC weapons be used against U.S. and coalition forces, the political implications would be profound and the military effects could be substantial at both the strategic and operational levels.

Given the potential impact of such use on individual units and larger formations as well as on civilian infrastructure, the United States must have sufficient capability both to render the use of NBC less effective and to prevail on the battlefield. Moreover, the requirement for mitigating the effects of NBC use can extend, particularly within a coalition, to the protection of civilians—both those essential to the war effort and the population at large.

In short, the United States must be able—in terms of doctrine, training, and equipment—to protect its forces and ensure they can operate and prevail in an NBC environment. This requires maintaining effective conventional and nuclear forces as well as detailed contingency planning for deterrence and defense in a regional context. Moreover, it demands that defense—both active (for example, ballistic and cruise missile defenses) and passive (effective chemical/biological weapons suits and detectors)—be given high priority and that counter-force capabilities suited to the unique characteristics of NBC targets be strengthened (for example, the ability to kill deep underground targets).

With such an arsenal of capabilities, U.S. deterrent posture would be strengthened. In fact, deterrence by denial—denying the enemy the benefits of NBC use—is the best guarantor of deterrence success. It is also the best hedge in the event deterrence fails.

NBC proliferation represents a joint problem for which there can only

be a joint solution. Inside and outside DOD, many initiatives in R&D, doctrine, gaming, and force planning (such as special operations forces) are underway. Problems do exist, however, both with regard to how far technology can offer solutions as well as institutional problems such as service priorities, budgetary constraints, and a realistic grasp of the implications of NBC use on military operations.

The Armed Forces have an essential role to play across the entire range of issues affecting the deterrence of, and the defense against, proliferation. CENTCOM and other regional commands are well placed to understand the politico-military-cultural dynamics which are critical to effective deterrence. Inputs from the commands are also key to determining how best to convey intentions and resolve, in declaratory policy and private channels. Most important, regional commanders in chief have the overall responsibility for contingency planning and execution of military options to deter, defend against, and destroy NBC threats in their respective areas of responsibility.

JFQ

Joint Theater Missile Defense Strategy

By ROBERT M. SOOFER



Patriot in Kuwaiti.

U.S. Army (Moses M. Masko)

Theater ballistic missile (TBM) defense was first used operationally during Desert Storm in response to Iraqi Scud attacks against Saudi Arabia and Israel. Since there was no joint doctrine or concept of operations for theater missile defense (TMD), the commander in chief (CINC) decided what to protect with limited assets. It was readily apparent, though, that TMD was a joint mission. Not only were Army Patriot missiles deployed on land, but the Air Force flew thousands of sorties in operations against mobile Scuds as satellites provided warning and cuing information, and Navy Aegis-equipped ships tracked enemy ballistic missiles.

This treatment of the role of TBM defense in theater strategy and operational art highlights

Joint Pub 3-01.5, *Doctrine for Joint Theater Missile Defense*.¹ However it goes beyond doctrine by exploring operational considerations

for employing TMD in various phases of combat. Finally, some background is provided on TMD in national military strategy.²

As defined in Joint Pub 3-01.5, joint theater missile defense (JTMD) is composed of four integrated operations:

- *passive missile defense*—individual and collective measures taken to posture the force to minimize the effects of a theater missile (TM) attack
- *active missile defense*—measures to intercept, destroy, and/or negate the effects of TMs after launch
- *attack operations*—actions to neutralize or destroy an adversary's ability to produce, deploy, and employ TMs
- *command, control, communications, computers, and intelligence*—capabilities to coordinate and integrate the joint force component capabilities to conduct passive defense, active defense, and attack operations.

Within the same publication the term *theater missile* is used for ballistic, air-to-surface, and cruise missiles with targets in a given theater (though short-range, non-nuclear, direct fire missiles, bombs, and rockets are not included). For purposes of analysis, and not to minimize other threats, this article deals exclusively with ballistic missile threats which, according to Joint Pub 3-01.5, are of foremost concern. Moreover, the focus is primarily on the active defense component of joint TMD operations.

**ballistic missile threats are of
foremost concern**

National Military Strategy

The end of the Cold War turned defense planning from the global Soviet threat to regional challenges. In a statement delivered to the House Armed Services Committee on March 30, 1993, Secretary of Defense Les Aspin indicated that, "With the demise of the Soviet Union, threats to stability in key regions throughout the world have become America's principal military concern and a major determinant of our defense budget priorities."

Accordingly, the administration advanced a national military strategy with complementary objectives: first, promoting stability through regional cooperation and constructive interaction, and second, thwarting aggression by credible deterrence and robust warfighting capabilities. They will be achieved through *peacetime engagement, deterrence and conflict prevention, and the ability to fight and win*. More specifically, the Armed Forces must be able to:

- deter and defeat aggression in two nearly simultaneous major regional contingencies
- maintain overseas presence of permanently stationed forces by exercises, port calls, et al.
- deter and prevent use of weapons of mass destruction (WMD) and their delivery systems
- support peace enforcement and missions such as counterterrorism and disaster relief.

Theater missile defenses will play a key role in implementing this new strategy. Our forces increasingly will be stationed in regions where potential adversaries have theater ballistic missiles. In support of overseas ground presence, TMD systems operating with early warning systems can provide limited- and wide-area defense against theater ballistic missiles for forward-deployed and expeditionary forces. They can defend U.S. and local forces, bases, harbors, airfields, and cities. Similar protection can be afforded to military units supporting peace enforcement and humanitarian missions. Finally, TMD can contribute to the deterrent mission of forward deployed U.S. forces by reducing their vulnerability to ballistic missile attack and countering the threat or use of WMD.

The Gulf War illustrated the political and military value of protection against threatened or actual use of ballistic missiles and WMD. Deploying TBM defenses against this threat will allow U.S. leaders to execute campaign plans and maintain coalition solidarity.³

Theater Strategy

The growing ballistic missile threat is well documented. In the administration's judgment, as contained in the *Bottom-Up Review*, regional aggressors could soon field 100–1,000 Scud-class ballistic missiles, some armed with nuclear, chemical, or biological (NBC) warheads.⁴ There are reports that today at least 15 nations have ballistic missiles, a number that could rise to 20 by the year 2000.⁵ According to Joint Pub 3-01.5, there is a tendency toward increasing range, lethality, accuracy, and sophistication.

Theater ballistic missiles may often have greater political than military significance. They can pose a political threat by weakening the will of defenders when targeted at civilian areas. With longer-range missiles, aggressors could strike the territory of our allies, endangering the coalition. A CINC may have to consider TBM operations outside his immediate theater in this instance.

Joint doctrine also indicates that TBMs could be used throughout a conflict against tactical, operational, and strategic targets to disrupt offenses, defenses, and support, and to reduce friendly capabilities. These targets are political (for example, cities, cultural sites, non-coalition states, and vulnerabilities with propaganda value) and military (for example, lines of communication, logistical facilities, counter-TMD activity, countervalue attacks on population centers, and choke points).

It should be noted that regional TBM powers for the most part operate under targeting and employment constraints. This can restrict the variables that CINCs must consider in determining the need for TMD protection. For example, TBMs can be limited by range, suitable deployment areas, accuracy, daily sortie rates, and reconnaissance and battle damage assessment. Estimates of enemy TBM capabilities would affect TMD deployment decisions. For instance, poor accuracy may mean that hardened targets can forgo defenses, range limitations can put targets out of reach, and lack of reconnaissance may reduce the risk from TBM attack against mobile assets. Specific targets for theater ballistic missiles might include air defense artillery sites, command and control elements, communication nodes, aircraft facilities, seaports and harbors, logistic centers, power and water plants, nuclear delivery systems and storage sites, naval ships and fleet operating areas, ground maneuver forces, amphibious objective areas, cities, industrial complexes, merchant shipping, and terrain choke points.

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Operational Considerations

During pre-hostilities, TMD deployment is intended to deter aggression by demonstrating U.S. resolve and coalition solidarity. Such deployments can dampen incentives for preemption by denying an enemy ballistic missile force quick and undefended access to key targets. If conflict is unavoidable joint doctrine states that TMD can protect deployed coalition forces, critical assets, and vital interests; detect and target TBM platforms; detect, warn, and report TBM launches; coordinate multifaceted responses to attack with other combat operations; and reduce or minimize the effects of TBM damage.

One factor that theater TBM planners must take into account in developing JTMD strategy is that the assets to be protected almost always outnumber active defense assets. Offensive attack operations for TMD are similarly limited and will be further strained by added theater requirements. The following is not an attempt to define a concept of operations for JTMD. Rather, it hopefully reveals the operational considerations that dictate JTMD use during the various phases of combat operations.⁶ The discussion under each phase describes the situation during the phase, illustrates the potential TBM threat, and analyses TMD priorities and available capabilities.

Pre-hostilities. In a crisis U.S. forces may be required to deter aggression while reassuring friends and allies. This may require a demonstration of force such as joint exercises; moving land,

sea, or air forces into the area; or deploying theater ballistic missile defenses as recently seen in South Korea. In some instances,

TMD deployments would be welcome and proceed in the context of alliance or coalition agreements. Ground-based systems could be moved into place as a visible sign of U.S. commitment. But land force deployments may not be welcome in other instances or when the United States does not wish to make its deployment obtrusive for fear of exacerbating the crisis, which makes offshore TMD preferable. In any event, in crises where ballistic missile use is possible, TMD gives commanders greater flexibility in deploying and employing forces—whether in theater or poised to react to imminent hostilities. The Patriot battalion sent to South Korea last year is an example: half of the missiles were positioned to protect deployed U.S. forces (although the bulk remained unprotected) and others protected a major reinforcement area, the port of Pusan.

Phase I—Halt the Invasion. Where feasible the highest defense priority is to minimize the territory and strategic facilities that can be captured. The responsibility for initial defense rests with in-

digenous forces. In some instances, U.S. forces may be stationed in or near the theater and may move to assist defenders. The bulk of forces, however, is likely to come from the United States. Depending on the type, range, and accuracy of enemy ballistic missiles, targets can be political to demoralize the public and disrupt a coalition or military to support an offensive. The latter include air defenses, air bases, aircraft on the ground, C³ nodes, marshalling areas, and logistics facilities. Chemical warheads may be used against troop concentrations or airfields. Ballistic missile attacks can be particularly effective in degrading anti-aircraft capability and gaining command of the skies. An enemy may have a limited number of ballistic missiles which are held in reserve. Additionally, ballistic missile attacks may occur outside the theater as a deterrent against external involvement.

During this phase U.S. and coalition assets, whose TBM capability may be outnumbered or nonexistent, are the most vulnerable. If our forces are not forward deployed in theater, their only TMD assets will be offshore or ground-based in nearby theaters. Assuming that naval assets are in range protection can be afforded to allied population centers and forces under ballistic missile attack. Depending on the scenario, a priority can be civilian targets, national command authorities, political nodes, or ports where reinforcements arrive. TBM launchers can be attacked by sea-based air or land-based fighters from nearby theaters. If U.S. forces are already in theater, defending them is an essential priority.

Commanders with limited TMD will have difficulty prioritizing their assets, often having to choose between local populations and their own forces. Inaccurate TBMs, however, are far more likely be used against civilian targets since they are not as effective against military targets. TMD attack operations must be weighed against other uses of joint capabilities such as direct attacks on advancing enemy forces, C³I nodes, and air defenses. Finally, passive measures can be taken to reduce the vulnerability of in-place U.S. forces to TBM attack.

Phase 2—Build Combat Power. Once an attack is halted, a coalition focuses on building combat power and logistics while reducing the enemy's capability and will to fight. As more land, sea, and air forces arrive from the United States and allied nations, the emphasis shifts to isolating enemy ground forces and destroying them, neutralizing air and naval forces and their logistics, and attacking targets in the rear. Meanwhile, U.S. or coalition forces prepare for a counteroffensive.

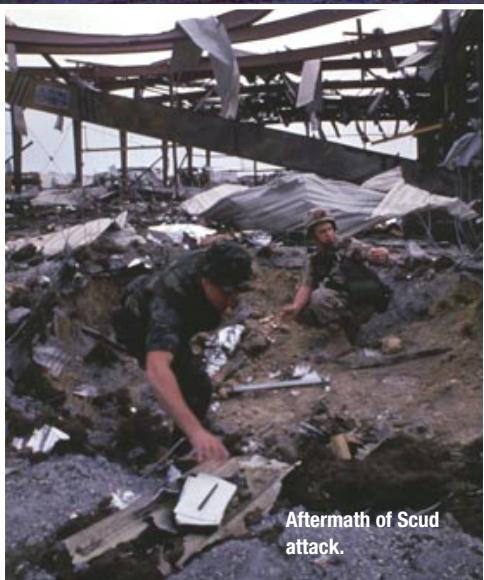
Enemy TBMs can be employed against air bases and ports to thwart reinforcements. TBM

TMD gives commanders flexibility in deploying forces



USS Antietam cruising to Arabian Gulf.

U.S. Navy (David Lloyd)



Aftermath of Scud attack.

U.S. Air Force (Lee Corkran)

strikes can be expected against troop marshalling areas as well as rear areas. They can also be used to break the will of defenders by inflicting casualties that would otherwise be impossible because of U.S. land and air-power in theater. The most effective use of TBMs, however, may be striking at the political cohesion of a coalition. Depending on the range of enemy TBMs, they can also be used against targets outside the theater to widen a conflict or fragment coalition partners, as when Iraq launched Scuds against Israel. If Saddam had possessed Chinese CSS-2s (now deployed in Saudi Arabia), he could have attacked targets in Europe.

If it takes months for a build-up, protecting the cohesion of a coalition or alliance is a high priority. This can require TMD deployments to other theaters vulnerable to TBM attack. Civilians and infrastructure must be protected as a coalition buys time to mount a counteroffensive. The next priority is protecting theater reinforcement areas and lines of communication. With the build-up of air forces in theater, attacks on TBMs can increase with active TMD assets protecting high-priority resources. Mobile ground-based assets such as Patriots and, in the future theater high-altitude area defenses, can protect inland areas previously out of sea-based TMD range. Sea-

based TMD can be released to other theaters. Highly integrated communications between surveillance and warning assets, active defenses, and attack operations (that is, cooperative engagement) should be available to contribute to the TMD mission in this phase if not earlier. Special operations forces can also be made available to target and destroy enemy TBM launchers behind enemy lines.

Phase 3—Defeat the Enemy. In this phase U.S. and allied forces mount a large-scale land, sea, air counteroffensive to destroy enemy war-making capability, retake territory, and achieve other strategic or operational objectives including amphibious assault landings in an enemy's rear. By this time allied TMD operations should succeed in degrading the TBM threat. Most likely, the few remaining TBM assets are used against strategic targets to disrupt a coalition through attacks on populations or political, economic, or religious targets. Again, depending on circumstances, an enemy can withhold TBM fires in anticipation of a counteroffensive and use them to halt ground advances, channel attacks into more defensive positions, repel amphibious assaults, or disrupt the ability of a coalition to sustain the counteroffensive. Facing imminent defeat, an enemy can also employ NBC on TBMs. With a shift to offensive operations, available aircraft for TMD attack can decline, putting a greater burden on active defense. TBM must support the advance of front lines. With the vulnerability of amphibious operations, the objective and supporting fleet opera-

tions areas as well as air bases must be priorities for sea-based TMD.

Phase 4—Provide Post-War Stability. Forces remain in theater following an allied victory to ensure compliance with peace accords or cease-fire agreements and to help reestablish friendly governments. As with Iraq, this can require a sustained presence with the

assets to be defended will exceed active TMD capabilities

prospect of small-scale hostilities. With an enemy's will broken and its armies destroyed, there is little likelihood of TBM action against military targets. A terrorist threat or possibility of retribution against political targets, however, must not be ruled out unless allied forces maintain complete control over enemy territory. Protecting populations and vital assets within TBM range is prudent until the threat is nil. Ground-based active TMD units can be redeployed for this purpose as needed. Surveillance and warning systems also must be kept in place.

Assets to be defended both inside and outside a theater will exceed active TMD capabilities projected for the next 10–15 years (and for only one major regional conflict). Given the uncertainty of the TBM threat and its context, the mission will have to rely on joint capabilities and the synergy of integrated active and passive defenses, attack operations, and C⁴I, all of which must be rapidly deployable or employable from the United States, forward bases, or ships.

Serious choices will have to be made to maintain alliance solidarity between the protection of cities and infrastructure and the defense of U.S. and allied forces. The choice may vary with the operational phase, but active TMD capabilities must defend centers of gravity, despite the risk of an attack to lower priority assets which are not directly defended according to joint doctrine.

One way to maximize limited active defense assets is to develop and deploy land, sea, and air-based TMD systems with the ability to detect, track, and control missiles. An example used by the Vice Chairman, Admiral William Owens, in an article published last year in *JFQ*, is to deploy land-based acquisition and fire control radar in theater to control missile interceptors fired offshore by sea-based platforms. Not only would this extend the range of sea-based defenses, which are limited by the line-of-sight radar on Aegis ships, but also ease demands on airlift by obviating the early need for land-based launchers and missiles. Likewise, sea-based radars can pass acquisition and tracking information to land-based systems already in place.

Another way to compensate for limited TMD is to encourage our allies to deploy their own systems. This calls for a joint and coalition TMD

doctrine and a concept of operations, applicable to other combined operations such as NATO air defense. At very least, the United States should look at ways to connect TMD with extant regional battle management/C³ systems to take advantage of indigenous capabilities.

In the final analysis, for as long as national military strategy calls for forward deployed U.S. forces and the ability to respond to regional crises, there will be an important role for theater missile defenses. The ballistic missile threat will only intensify as various states develop longer-range missiles with greater accuracy and ability to deliver WMD. As the Gulf War demonstrated, an effective defense must integrate land, sea, and air assets operating under joint doctrine. Despite the necessities of joint doctrine, however, strategies for using TMD in contingencies will rest with theater commanders who must wrestle with considerations that are only touched on here. **JFQ**

NOTES

¹ Joint Pub 3-01.5, *Doctrine for Joint Theater Missile Defense* (Washington: Government Printing Office, March 30, 1994).

² Secretary of Defense, *Annual Report to the President and the Congress* (Washington: Government Printing Office, January 1994), pp. 51–56; Ballistic Missile Defense Organization, *1993 Report to Congress on the Theater Missile Defense Initiative* (Washington: Government Printing Office, 1993); and Dennis McDowell, "Theater Missile Defense: A Joint Enterprise," *Joint Force Quarterly*, no. 6 (Autumn/Winter 1994–95), pp. 80–87.

³ Department of Defense, *National Military Strategy of the United States: A Strategy of Flexible Response and Selective Engagement* (Washington: Government Printing Office, February 1995), pp. 4–6.

⁴ According to Les Aspin, "The United States cannot accept a situation in which the threat or use of ballistic missiles armed with WMD constrain its ability to project military forces to meet commitments abroad and achieve national security objectives. Once deployed, U.S. forces must have TMD defense capabilities to deal with ballistic missile threats." See, *Annual Report*, p. 53.

⁵ By decade's end, active defense assets could include nine advanced capability Patriot battalions (six per battalion with eight launchers per battery), two THAAD batteries (operational prototypes), and one sea-based TMD system on an Aegis-equipped cruiser. By comparison, the advanced-capability Patriots can defend four times the area of Patriots employed during the Gulf War, while THAAD increases the defensive area ten-fold. The sea-based system will be slightly better than the advanced Patriot.

⁶ See *Annual Report*, pp. 13–15. Joint Pub 3-0, *Doctrine for Joint Operations*, identifies these phases as pre-hostilities, lodgement, decisive combat, follow-through, and post-hostilities and redeployment.

THEATER

Ballistic Missile Defense

By RONALD R. FOGLEMAN

I look upon theater ballistic missile defense (TBMD) from an operational perspective—and as an observer of emerging technology with an eye to integrating current and future Air Force capabilities to assist joint force commanders (JFCs). As such, I view TBMD from a pragmatic, joint perspective. Ballistic missiles continue to spread around the globe. More than 15 countries possess operational missiles and others have programs to acquire them. This development, and the spread of weapons of mass destruction (WMD), is cause for grave concern and determined action. While we are hopeful that the missile technology control regime and state-to-state negotiations will help constrain ballistic missile proliferation, we must prepare to defend against ballistic and cruise missile attacks in future conflicts.

Desert Storm

This scenario was seen on a small scale in Desert Storm. Using low-tech Scud missiles, Iraq threatened coalition cohesion, affected planning for combat operations, and killed 28 American troops in Dharian. The proliferation of more sophisticated ballistic missiles with greater accuracies and submunition warheads poses a tougher challenge. Armed with them, an enemy could disrupt a U.S. or coalition response unless an effective counter is fielded.

Saturation ballistic missile attacks against littoral forces, ports, airfields, storage facilities, and staging areas could make it extremely costly to project forces into a disputed theater, much less

carry out operations to defeat a well armed aggressor. Simply the threat of such attacks might deter the coalition from responding to aggression in the first instance.

In the Gulf War we also had trouble defending against Scuds when delivery vehicles broke into several large pieces during the terminal phase. Debris made it difficult to identify and intercept the actual warhead; so terminal defenses are likely to be stressed by ballistic missiles fielded with warheads that release submunitions at or before apogee in the missile's flight.

During Desert Storm we also learned the importance of countering mobile ballistic missile capability. An aggressive Scud hunt with air assets paid significant dividends. Capitalizing on our dominance of Iraqi airspace, we denied the enemy use of fixed Scud sites and made it dangerous for mobile Scuds to move. The combination of sensor assets we had at that time—JSTARS, U-2, TR-1,

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and AWACS—flew with impunity over enemy territory. They cued ground- and airborne-alert aircraft to vehicular movement, frequently resulting in rapid attacks on suspected launchers. We dropped area denial mines to inhibit the mobility of Scud transporter-erector-launchers (TELs). After Scud launches, we concentrated attack aircraft in launch areas to hunt suspected launchers.

Our attacks against the Iraqi forces effectively suppressed rates of fire, disrupted operations tempo, and limited multiple launches. The enemy had 500–600 missiles and upwards of 36 TELs but fired only 88 Scuds. Having previously demonstrated a high launch rate in the Iran-Iraq War by firing almost 200 Scuds, Iraq should have been able to expend its entire Scud inventory. That it did not is a tribute to intense coalition air operations that destroyed launchers and related logistics or kept the enemy too busy hiding to fire its missiles. These operations also precluded coordinated launches of Scuds that could have overwhelmed our limited point defenses.

We can statistically show that Iraq launched Scuds more often during bad weather with low ceilings than in good weather—perhaps believing

that bad weather offered protection from attack. The bottom line is that coalition dominance of Iraqi airspace apparently drove the enemy to seek the cover of clouds to protect its TELs. Despite claims to the contrary, the effort required to achieve these results was not excessive. Less than 4 percent of the 42,000 strike sorties flown during the war were against elements of the Iraqi ballistic missile target set. Ultimately, coalition domination of the air and vigorous attack operations provided a disincentive to launch Scuds.

All of this argues strongly for the United States to develop a balanced TBMD. It also helps explain why that is a high DOD and Air Force priority. At present the bulk of the funding is going to the Army and Navy for development of several different systems primarily designed to intercept ballistic missiles in terminal phases. This is the catcher's mitt approach. We have not sought an Air Force role in this part of the equation except for early warning and theater command and control. Instead, we have focused on other elements that can capitalize on the unique capabilities of air and space forces to negate enemy missiles. They include attack operations, boost phase intercept, and battle management, command, control, communications, computers, and intelligence (BMC⁴I).

Attack Operations

The Air Force is aggressively working to improve its ability to mount attack operations against mobile theater ballistic missiles (TBMs). These operations are part of the overall theater air battle orchestrated by the joint force air component commander (JFACC). The goal is to destroy enemy TBMs and the infrastructure that supports them—day or night, in good weather or bad. As indicated by Desert Storm, attack operations can have a tremendous impact on TBM effectiveness. Ultimately, we need a balanced mix of offensive and defensive operations to counter such missiles. In this context, we are developing and exercising operational concepts and capabilities to attack the breadth of the enemy TBM target system.

These efforts will rely heavily on accurate intelligence preparation of the battlespace. Prior to a conflict intelligence specialists will develop a comprehensive understanding of enemy TBM to include: missiles, related equipment, and launchers; support infrastructure; employment doctrine, tactics, and concept of operations; and likely operating areas and geographical limitations. Also, intelligence analysts will propose friendly force operations and tactics to counter enemy TBM. All this will be provided to the JFACC for development of a counter-TBM portion of the air campaign. A key object of that campaign will be to delay, disrupt, and destroy enemy mobile TBM operations through preemptive attacks. Barring that, we will seek to destroy TELs immediately after launch. Simply, if the missile flies, the TEL dies. Intelligence preparation of the battlespace will identify high payoff targets such as forward operating bases, command and control nodes, hide sites, pre-surveyed launch sites, and connecting roads in TBM operating areas.

Preemptive precision strikes against point targets and application of denial weapons will greatly hinder enemy near-term TBM activity. Meanwhile, lethal precision attacks against the TBM support tail will undercut long-term operations. Enemy preparations for mobile TBM launch at or near a launch site offer an excellent opportunity to identify and destroy a TEL with lethal air strikes and thus prevent launch. If an enemy launches a mobile TBM, detection of the launch will key our attack operations. We will capitalize on overhead and surface sensors, special operations forces, JSTARS, AWACS, Rivet Joint aircraft, U-2s, and unmanned aerial vehicles (UAVs). The inputs will identify the launch point and cue Air Force and other service assets for time-critical strikes.

Numerous initiatives are underway to streamline the sensor-to-shooter loop and to enhance the ability to detect, track, target, and destroy

less than 4 percent of strike sorties were against the ballistic missile target set



**BMDO Clementine 1
aboard Titan IIG.**

mobile launchers. Upgrades to sensors on JSTARS, U-2, F-15E, and F-16 aircraft will provide automatic target cuing and recognition. Enhancements to the joint tactical information distribution system (JTIDS) will improve timelines of joint attack operations. The acquisition of UAVs with high resolution sensors, long range, and extended loiter time will enable us to zero in on TEL locations throughout the depth of a theater. Transmission of real-time intelligence directly to the cockpit from aircraft and overhead sensors via communication satellites will provide time-critical target and threat data. Near-real time digital targeting data from U-2s and UAVs to an

TR-1.



DOD

DOD

F-15E will facilitate pilot identification of TELs for attack. Procurement of advanced precision munitions will help assure effective target engagement and destruction. These enhancements will advance time-critical targeting and attack of mobile ballistic missiles.

In Roving Sands '95 we successfully attacked the breadth of enemy TBM, with 17 percent of the air effort going to TBM attack operations over five days. Joint air forces (Air Force F-15Es and Marine Corps F-18s) attrited enemy TBM infrastructure (TELs, cranes, support equipment) by 40 percent. Also, numerous TELs were detected by U-2s and UAVs before missile launches. Such exercises refine our concept of operations and determine how best to use new capabilities.

Also of interest is a recent study by the Joint TMD Project Office that determined the added

payoff from combining attack operations with terminal defenses in the early days of a conflict. The study showed a 61 percent reduction in enemy missile launches,

85 percent in TELs, 71 percent in active defense missiles employed, and 50 percent in leaker missiles that got through all defenses.

Ultimately, effective attack operations hinge on dominating enemy airspace. The F-22 will be

crucial to seizing airspace and exploiting it to counter mobile ballistic missiles. Its domination of enemy airspace will enable friendly strike and sensor aircraft to conduct attack operations against TBMs with impunity. While flying combat air patrol, the F-22 will exploit real-time intelligence in the cockpit and deliver precision air-to-ground munitions against TELs or hide sites. This on-hand capability may well preclude the need to scramble other attack aircraft to strike pop-up targets. By dominating airspace in this fashion, the F-22 will provide a strong incentive for an enemy to forego robust TBM operations.

Boost Phase Intercept

The second area of TBMD being emphasized is boost phase intercept (BPI). Developing the capability to destroy a missile in its boost phase is vital. As the director of the Ballistic Missile Defense Organization (BMDO), Lieutenant General Malcolm O'Neill, indicated in congressional testimony, ballistic missiles are best targeted in the boost phase when they are large, vulnerable, and highly stressed targets. An effective

boost phase intercept capability means warheads from the intercepted missiles will fall back on enemy territory, not our own. This is a strong disincentive against TBMs—especially if mated to WMD. Moreover, developing warheads that fractionate before apogee greatly complicates the terminal defense task, potentially overwhelming it.

Recent developments in laser technology indicate that our most promising option for boost phase intercept is the Air Force airborne laser (ABL) program. Live-fire lethality tests indicate that ABL will accomplish speed-of-light catastrophic kill of theater missiles in boost phase when they are most vulnerable. The concept calls for ABL platforms to be air-refuelable, wide-body aircraft able to deploy worldwide and close with other early-arriving air assets. It will arrive within hours and quickly establish an on-orbit combat air patrol to protect arriving U.S. and coalition forces.

ABL will have an on-board, passive infrared sensor with a 360-degree sweep capable of autonomous detection, acquisition, and tracking of TBMs without external cuing, but equipped to fully exploit external cuing when available. It will incorporate a high energy, chemical laser in the multi-megawatt class with enough laser fuel for 30 to 40 engagements per 12 to 18-hour mission. Moreover, the airborne laser will engage TBMs above the cloud deck out to hundreds of kilometers as it stands off from enemy territory. An on-board system will slew the telescope, determine final target track, dwell the laser, and select other targets to intercept. It is anticipated that ABL can engage at least three nearly-simultaneously launched TBMs before booster burn out.

The airborne laser also will offer a limited capability to intercept enemy cruise missiles and high value airborne assets such as enemy sensor platforms and command and control aircraft. This capability will complement, not replace, that of the F-22. Initial funding for the design of an ABL demonstrator has been included in the FY97 program objective memorandum. We plan to field a demonstrator by the year 2002 that will offer significant operational utility in a contingency.

While ABL is the best solution to boost phase intercept, we continue to support the BMDO efforts to develop technology for a hypervelocity boost/ascent phase missile. This kinetic energy, airborne interceptor would be carried on fighters for high altitude release against ballistic missiles prior to reaching apogee. The Air Force is currently working with the Navy to address the concept of operations for employing it.

The Air Force recognizes that a boost phase intercept will not negate the need for highly capable terminal defenses. On the other hand, BPI



U.S. Army

THAAD.

General Malcolm O'Neill, indicated in congressional testimony, ballistic missiles are best targeted in the boost phase when they are large, vulnerable, and highly stressed targets. An effective

weapons will contribute to a layered defense against theater ballistic missiles. First, BPI deters an enemy's use of WMD by keeping it out of the "WMD box." Second, it vastly expands the overall area protected by a layered defense. Third, terminal defense engagement tasks remain manageable, especially in light of submunition warheads that could fractionate before they enter the terminal phase or the defense engagement area.

On a related note, the potential payoff from BPI initiatives makes it important that Congress approve the entire \$49 million requested in the President's budget for BMDO work on these programs. We've seen a tremendous shift in funding, and we see the remaining funding being cut. We think this is a mistake.

BMC⁴I

The third area involves improving battle management, command, control, communications, computers, and intelligence (BMC⁴I) required for TMD. In March 1995 the Air Force achieved an initial operating capability with the attack and launch early reporting to theater (ALERT) system. This builds on improved defense support payload (DSP) data processing hardware and software plus enhanced communications links with quicker warning of launches from

space-based sensors, and better cuing data for theater defenses than during the Gulf War. A space-based infrared system is being developed that will re-

we must not undo improvements in integrating intelligence into combat infrastructure

port ballistic missile launches directly to affected theater forces and provide critical mid-course tracking and discrimination data for terminal defenses. This in effect will extend an interceptor's range and increase its effectiveness against ballistic missile warheads.

JTIDS has become the primary data link for joint theater missile defense operations, and the installation of JTIDS terminals aboard sensor, command and control, and shooter platforms is now underway. Moreover, we are developing JTIDS enhancements to provide reliable connectivity that will reduce attack timelines and enhance the probability of success.

The Air Force is upgrading its theater air control system to provide responsive command and control for missile defense. With BMDO and the Advanced Research Project Agency we are working to automate processes, field advanced decision aids, and rapidly disseminate information to command and control nodes and joint shooters in near-real time. Also, the implementation of a contingency theater automated planning system will enhance the effectiveness of command and

control while improving connectivity to forward units in the planning phase of missile defense.

In partnership with BMDO and the Marine Corps, we are developing a combat integration center to enhance decentralized execution of operations against mobile TBMs. The center receives sensor data from space-based assets and joint radar systems, then employs JTIDS to flash targeting and warning information across a theater. Meanwhile, it uses various decision aids to recommend offensive and defensive actions against a specific TBM threat. The initial prototype was employed with excellent results during exercise Roving Sands. It achieved robust connectivity with sensors and shooters throughout the theater. Operators routinely processed sensor inputs and tasked attack assets within one to two minutes.

Another Roving Sands success story was the JFACC situational awareness system which combines key theater intelligence information in a single easy-to-grasp visual presentation that can be viewed on a laptop computer screen. Both Marine and Air Force users lauded its contribution to the conduct of the air battle, particularly theater missile defense operations.

In consolidating management of imagery collection, analyses, and distribution to improve imagery support, we must not undo improvements made in integrating all types of intelligence into our combat infrastructure and architecture. The stresses placed on a commander's C⁴I to deal with time-critical targets, particularly TBMs, make it essential that imagery be integrated as a seamless element of his operations.

The Air Force is seriously pursuing its charter to work with the other services to develop a theater-adaptable, jointly integrated theater air defense BMC⁴I system. As executive agent, we will integrate existing architectures and develop future ones that provide warfighting CINCs a flexible, seamless command and control system.

Theater ballistic missile defense is a high priority for the Nation and the Air Force, and it is essential to maintaining our joint warfighting capability. Air Force initiatives in attack operations, boost phase intercept, and BMC⁴I will contribute significantly to achieving this goal.

JFQ



**Tomahawk Land
Attack Missile.**

U.S. Navy (Bruce Morris)



DEEP STRIKE: The Evolving Face of War

By ALBERT R. HOCEVAR, JAMES A. ROBARDS,
JOHN M. SCHAFER, and JAMES M. ZEPKA



U.S. Air Force (Marvin Lynchard)

Deep strike operations, a traditional domain of the Air Force, have evolved with the advent of long-range land-based and sea-based weapons. To maximize force effectiveness and synergy in the adjacent close battle, joint doctrine must define deep strike operations as well as concomitant responsibilities for command and control and mission execution. This issue arose in a Gulf War post mortem that identified the lack of a focal point for deep strike target planning, coordination, and attack execution as a campaign shortfall.¹ While several solutions have been proposed, deep strike remains at the center of a heated controversy. It is not defined in service doctrine, much less joint publications. It takes various forms and meanings. The Army uses *deep battle*, *deep attack*, and *deep strike* interchangeably; the Navy adopts the holistic term *strike warfare*; and the Air Force refers to *interdiction*, *air interdiction*, and *battlefield air interdiction*.

the exigencies of the European battlefield have shaped the Army

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While the applicability of deep strike may be argued in given combat situations, its potential use and related planning and coordination should be examined. Also, in view of force reductions, the efficient, synchronized, and synergistic role of combat power in the deep battle is mandated to influence the outcome of the adjacent close-in battle, which will determine victory or defeat. Thus deep strike must be defined and a conceptual framework developed for its use in joint warfare.

Five assumptions are germane to this process. First, conflict remains non-nuclear. Using nuclear weapons elevates battle planning and management to a higher theoretical tier and invalidates concepts derived from the conventional battlefield. Second, with advancements made in accuracy, strategic and tactical concepts are not helpful in dealing with precision weapons. Also, in forsaking the division between tactical and strategic levels of organizing, training, and equipping forces, the Air Force eliminated distinctions among airframes and major commands, referring collectively to combat air. Third, deep battle is primarily an extension of aerospace power that utilizes a platform operating either in or passing through the environment. Consequently, not only must the role of combat fixed-wing aircraft in the deep strike be analyzed, but also cruise missiles and long-range artillery missiles. Fourth, contributions from national reconnaissance aircraft and satellites as well as special operations forces (SOF) are irrefutable. Operating under separate guidelines, national-level direction of such assets is beyond the scope of deep strike command and control architecture. Last, these operations are not applicable to low intensity/guerrilla warfare.

Service Perspectives

Army. The exigencies of the European battlefield have shaped the Army perception of deep strike warfare. Massed echelons were a dilemma to NATO planners who sought to arrange the battlefield to avoid the exhaustion of wave after wave of enemy forces without being able to trade space for time in the face of superiority. Until the 1970s combat operations were seen as two separate contests: ground forces fighting the close battle while airpower attacked deep. The Army adopted AirLand Battle to counter the numbers and tactics of the Warsaw Pact. It called for destroying enemy forces before they reached the close battle area so that front line commanders would engage a weakened enemy. AirLand Battle was a realization that time and distance are central to success. Synchronized attacks on enemy forces as they were introduced to the main battle area were essential to disrupting and destroying follow-on formations.

Commander Albert R. Hochevar, USN; Major James A. Robards, USA; Major John M. Schafer, USAF; and Major James M. Zepka, USAF, collaborated on this essay while attending the Armed Forces Staff College.



DOD

Joint Surveillance and Target Attack Radar System.

To realize the intent of this doctrine, the Army found that a joint approach had to be taken to ensure victory in the close fight. In Field Manual 100-5, *Operations*, deep operations are defined as "those directed against enemy forces and functions beyond the close battle. They are executed at all levels with fires, maneuver, and leadership. . . . They expand the battlefield in space and time to the full extent of friendly capabilities." Thus the traditional concept of waging battle independently of the other warfighting arms was relegated to the historical archives.

The corps is the focal point of joint deep strike operations. Although division commanders have a deep strike capability, a corps has the people, expertise, equipment, and focus to execute an entire operation. To facilitate operations and cope with requirements of deep strike, a specialized cell has been created to integrate the commander's intent into a battle plan. Pivotal to this process is an accurate, is the timely flow of intelligence that includes acquiring and disseminating

products from national sources in step with the battle. Along with intelligence, there are representatives in a mixed-service cell from corps artillery, corps aviation, air defense artillery, the Air Force, and even naval fire support as well as electronic warfare, targeting, SOF, and planning functions.

By joining the multiple launch rocket system (MLRS) and the Army tactical missile system (AT-ACMS), Army aviation (attack helicopters), Air Force close air support, electronic warfare, and naval fire support representatives, the cell acquires a multidimensional warfighting character. Collocating representatives enhances coordination by using critical assets, facilitating interservice communication, and focusing on a common goal. Although the composition and design of the cell varies slightly from corps to corps, the function and intent remain the same throughout the Army.

Navy. According to Naval Warfare Publication 1, *Strategic Concepts of the U.S. Navy*, strike warfare encompasses "the destruction or neutralization of enemy targets ashore through the use of conventional or nuclear weapons." Since air-frames, tactics, techniques, and procedures are

similar in achieving target destruction, airpower projection from the sea operates on the same basic tenets as that of the Air Force.

The Tomahawk land attack missile (TLAM), however, is unique to the Navy. Capable of being fired from a submarine or surface ship, it has a range of 650 nautical miles. The Tomahawk made its public debut in the Gulf War as it deftly navigated downtown Baghdad to destroy various targets. Unmanned, air breathing, and expendable, it can be made "with less expensive materials than a strike aircraft and need not incorporate all of the complex electronic or defensive systems of a manned aircraft."² It can also be rapidly reprogrammed to meet changing target requirements.

Air Force. Although not specifically defining deep strike, the Air Force uses the terms *air interdiction* and *counter air operations*. The former is de-

fined in Air Force Manual 2-1, *Tactical Air Operations*, as "operations conducted to destroy, neutralize, or delay... military potential" while the latter term defined in Air Force Manual 1-1, *Basic Aerospace Doctrine of the United States Air Force*, as "oper-

ations directed against the enemy's air offensive and defensive capability in order to attain and maintain a desired degree of air superiority."

Interdiction missions are either preplanned air strikes against specific targets or armed reconnaissance sorties with the primary purpose of locating and attacking targets of opportunity. Conducted against a single target or selected portions of a targeted complex, missions against a specific target are designed to have the maximum effect on an enemy's ability to sustain intense, high-tempo offensive and defensive operations. Armed reconnaissance sorties are directed against enemy materiel, personnel, and facilities in a specified area. Their desired effect is to destroy, trap, or limit the mobility of forces and materiel.

Joint Doctrine

The objective of counter air operations is to maintain air superiority, thus preventing enemy airpower from effectively interfering with operations by friendly forces. Freedom of movement afforded by air superiority ensures that joint military objectives are achieved by either eliminating or curtailing an enemy's general air threat. Like the Air Force, joint doctrine employs the terms *air interdiction* and *counter air*. Air interdiction is defined in Joint Pub 1-02, *Department of Defense Dictionary of Military and Associated Terms*, as "air operations conducted to destroy, neutralize, or delay the enemy's military potential before it can be brought to bear effectively against friendly forces

at such distance from friendly forces that detailed integration of each air mission with fire and movement of friendly forces is not required." Again counter air involves operations aimed at attaining and maintaining a specified degree of air superiority by destroying or neutralizing enemy forces. The intent and conduct of such operations, as defined in joint doctrine, are fundamentally identical to the Air Force perceptions discussed previously.

Since Desert Storm, commanders and doctrine developers have sought to reconcile various views on coordinating and conducting the deep battle.³ To mitigate its impact on service doctrine, a definition must meet the intent of extant service doctrine yet be flexible enough to offer practical, unconstrained guidance. Deep strike can be defined as operations conducted to destroy, degrade, or neutralize enemy land, sea, and air forces before they are brought to bear against friendly forces.

To give a land force commander sufficient depth for high-tempo maneuvering, deep strike operations should be conducted beyond the fire support coordination line (FSCL) and emphasize improving the efficiency of targeting and attacking targets beyond this line. An approach is needed that recognizes the deep, close, and rear areas of the battlefield and establishes organizations and responsibilities to conduct combat operations in them. Moreover, in an era of shrinking resources, it is imperative that such organizations be standardized to support warfighting commanders, since an enemy may not allow time to adapt to a new theater or threat as was the case in Desert Storm.

Target Coordination

Joint force commanders (JFCs) must ultimately integrate and synchronize all the aspects of attack and set conditions for victory by ensuring that deep strikes are effective and contribute to the defeat of a hostile main battle force. Since JFCs cannot personally coordinate the entire campaign, they can form a joint targeting coordination board (JTCB) with senior service component and staff officers to assist and advise them as command and control authorities. According to Joint Pub 3-0, *Doctrine for Joint Operations*, a board will typically review target information, develop guidance and priorities, and may prepare and refine joint target lists (it should also maintain a complete list of restricted targets and areas where SOF are operating to avoid endangering operations). Although briefly outlined in Joint Pub 3-0, JTCB structure and authority is vague and does not provide JFCs with a

JFCs must integrate the attack by ensuring that deep strikes are effective

readily available organizational framework to control deep strike operations. The criticality and complexity of the deep strike mission mandates that the basic JTCB structure be standardized with flexibility for various contingencies.

Deputy JFCs make ideal JTCB directors. Familiar with the overall campaign strategy, they have authority to quickly resolve targeting issues. For maximum synergism and synchronization of a campaign, joint force air component commanders (JFACCs) and joint force fires coordinators (JFFCs) should serve on JTCBs. Incorporating the

commander's intent, available resources, and limitations, including rules of engagement, into a joint fire support plan along with full authority to order fire missions, the expanded JTCB mission

should be to coordinate, integrate, and prioritize joint force requirements to include identifying and prioritizing resources for target acquisition and battle damage collection.

Setting Priorities

To establish the focus and level of effort for deep strike operations, the following priorities can be adapted to evolving battlefield conditions. The first priority of deep strike operations should be enemy command, control, and communications architecture and facilities. Although attacking this target set may not be immediately helpful, the long-range effects of inflicting strategic paralysis will be to dramatically reduce an enemy's ability to maneuver on the battlefield or perform normal functions of government. The second priority should be fielded forces, including establishing air superiority through counter air operations with joint suppression of enemy air defense (JSEAD), striking enemy sea forces, and interdicting land forces beyond FSCL before they can be brought to bear against friendly forces.⁴ The third priority should be key production facilities including oil, power, and defense industries, especially those that produce weapons of mass destruction. Fourth is the transportation infrastructure—railways, roads, and bridges—to prevent, neutralize, or delay additional land forces from reaching the forward edge of the battle area. The last priority, the civil populace, is targeted by psychological operations and nonlethal classified means.⁵

Because the ultimate goal of deep strike is victory in the close battle, centralized command and control, along with comprehensive, accurate, and near-real-time intelligence, will maximize the

the services must be able to detect ground targets deep behind enemy lines

synergism of advanced, long-range weapons systems such as aircraft and missiles. Command and control demands the capability to process, display, and communicate target acquisition data from service components and national intelligence assets to JTCB.

The Air Force domain of deep strike operations, therefore, must include Army surface-to-surface ATACMS and Navy sea-launched TLAM weapons systems. The fundamental means of Air Force command and control—the tactical air control system (TACS)—has the people, procedures, and hardware to plan, direct, and control operations with other services and allies. With the control agencies and communication-electronics facilities to ensure centralized control and decentralized execution of air assets, TACS can readily incorporate and accommodate the command and control requirements of Army and Navy deep strike systems. Located at an operations center, such as the Tactical Air Control Center (TACC), the deputy JFC, via JFACC, may exercise control over long-range weapons with the battle-tested airborne warning and control system (AWACS), the Airborne Command And Control Center (ABCCC), the contingency TACS automated planning system (CTAPS), and the new joint surveillance and target attack radar system (JSTARS).

Integrating the Attack

JSTARS, an airborne multi-mode radar with associated C³ equipment, battle tested during Desert Storm and now in full-scale development, can integrate long-range, deep strike weapons. It offers airborne radar to detect, track, and classify ground forces, along with processing equipment, controller stations, and command and control interfaces. JSTARS furnishes targeting information to tactical aircraft, standoff missiles, or Army artillery for precise, real-time attacks against moving enemy targets, including helicopters and slow-moving, fixed-wing aircraft.

The Army and Air Force recognized that in order for AirLand Battle to be a viable doctrine, the services not only must have weapons that can disrupt and destroy second echelon forces but must first be able to detect ground targets deep behind enemy lines.⁶ This is what JSTARS does.

With the introduction of JSTARS, together with the proven use of AWACS and ABCCC, an entirely new set of targeting capabilities is available to JTCB. Targeting data processed on these aircraft could be sent to Army or Navy component commanders via a joint tactical information distribution system (JTIDS) link to CTAPS terminals. Interconnected terminals at all component operations centers can provide automated targeting, collection management, situation analysis,

and improved air tasking order (ATO) development and distribution tools.

Centralized control of air assets has long been recognized as a tenet of campaign planning. From Operation Torch to Desert Storm, this concept has proven its value. Joint doctrine cedes the role of centralized control/decentralized execution to JFACCs as controlling authorities when two or more service components contribute aircraft or standoff missiles to operations. JFACCs have been effective in controlling Air Force and Navy aircraft. But a dilemma arises when Marine fixed-wing assets are included because doctrine has long regarded Marine Corps aircraft as close support weapons. Consequently, Marine force structure deemphasizes field artillery and surface-to-surface missiles. Transferring tactical air support provided by the air combat element from its command and control could jeopardize ground operations. Nevertheless joint doctrine is continuing to move toward centralization as seen in Joint Pub 3-56.1, *Command and Control for Joint Air Operations*. JFACCs must not only be the sole points of contact for air operations but must liaise with JFFCs to ensure the integration of ground systems and scheme of maneuver into air campaigns.

With ATACMS, MLRS, and attack helicopters, and the development of the extended-range ATACMS and tri-service standoff attack missile (TSSAM), the land component commander (LCC) now plays a crucial role in JFC execution of the deep battle. An organization that integrates and coordinates land-based deep fire systems is required to represent LCC needs at both the JFC level and laterally within the ground forces.

Because of all-weather, 24-hour capable land systems and the need to deconflict airspace to execute timely JSEAD, JFFCs as senior land force FS-COORDs function as LCC agents on deep battle matters. JFFCs may also remedy the Marine close air support dilemma. If JFCs consider it necessary to give command and control of Marine aircraft to JFACCs, JFFCs would be the means of realigning fire support to assist Marine ground forces. Army field artillery brigades and attack helicopters may be assigned new support missions to cover the shortfall. Joint Pub 3-09, *Doctrine for Joint Fire Support*, should address this JFFC concept as well as both Army and Marine aspects of land warfare. Since JTCBs are vehicles for coordinating and synchronizing land, sea, and air based weapons systems in deep strike operations, JFFCs should supplement, not supplant JTCBs. Taking LCC intent for fighting the ground war close and deep, JFFCs, via JTCBs, must integrate it with air campaigns designed by JFACCs.

The complexity of modern warfare shows that synchronization and synergy are essential to fighting and winning with minimal friendly casualties. To ensure that resources are not misused through inefficiency and service parochialism, command and control architecture for JTCBs should coordinate deep strike operations. **JFQ**

NOTES

¹ Fred F. Marty, "Synchronizing Fires in Joint and Combined Operations," *Field Artillery Journal* (February 1993), p. 1.

² Richard K. Betts, *Cruise Missiles and U.S. Policy* (Washington: The Brookings Institute, 1982), p. 3.

³ John H. Cushman, *Thoughts for Joint Commanders* (Annapolis: U.S. Naval Institute Press, 1993).

⁴ John A. Warden III, *The Air Campaign* (Washington: National Defense University Press, 1988), p. 17.

⁵ James P. Coyne, *Air Power in the Gulf* (Arlington, Va.: Aerospace Education Foundation, 1992), p. 44.

⁶ Millard Barger, "What the Air Force Has To Do To Put the 'Air' in the AirLand Battle," *Armed Forces Journal International*, vol. 123, no. 12 (June 1986), pp. 59-64.



OPERATION DOWNFALL: The Devil Was in the Details

By D. M. GIANGRECO

World War II ended with the dropping of “the bomb” on Hiroshima and Nagasaki. This sudden and unanticipated conclusion to the conflict was greeted with joy by the entire Nation, not least by the 2.5 million Americans slated to invade Japan’s Home Islands including Tokyo itself. The invasion forces were not only to come from the Pacific; First Army, which had pummelled its way from Normandy to the heart of Germany, and Eighth Air Force, which was based in England, were on the way. Morale was not good among veterans of the Battle of the Bulge, Guadalcanal, and other campaigns. As James Jones later wrote: “What it must have been like to some old-timer buck sergeant . . . [knowing] that he very likely had survived this far only to fall dead in the dirt of Japan’s Home Islands, hardly bears thinking about.”

Combat had been so bloody and prolonged that those who experienced it first hand felt little need to justify their belief that the atom bomb probably saved their lives. Their families, indeed, most Americans, understood this. Today, this sentiment is under attack by many who hold that using the bomb against Japan was cruel and unnecessary; but aside from the decades-old numbers game played by revisionist historians and veterans' groups alike, virtually no research has been produced on the invasion plans. John Ray Skates, a visiting professor at the U.S. Army Center of Military History, recently tried to fill this void in *The Invasion of Japan: Alternative to the Bomb*. (See the review of Skates' book by H. P. Wilmott in *JFQ*, Autumn/Winter 1994–95, p. 127, which prompted this article.)

Skates examines the invasion plans, offering details on esoteric subjects such as resupply over the beach and combat air patrols against suicide aircraft. But while his book is a windfall for anyone interested in the final days of the war, a range of problems negates much of its value and makes it useful to those attempting to reengineer history. Skates states, for instance, that "the last months of the Pacific war were stirred [by] passions that drove the war into extremes of violence" with "passion, hatred, and frustration moving almost beyond rational limits." Debate over how many casualties might have resulted from an invasion has long been a preoccupation of revisionist historians, and Skates joins the fray with gusto. He uses contradictory figures ascribed to various civilian and military leaders with ostensibly self-serving motives. That they might have attempted to make the best estimates possible with the information at their disposal does not seem to occur to him. One example is a casualty estimate that General George Marshall received from General Douglas MacArthur.

The Numbers Game

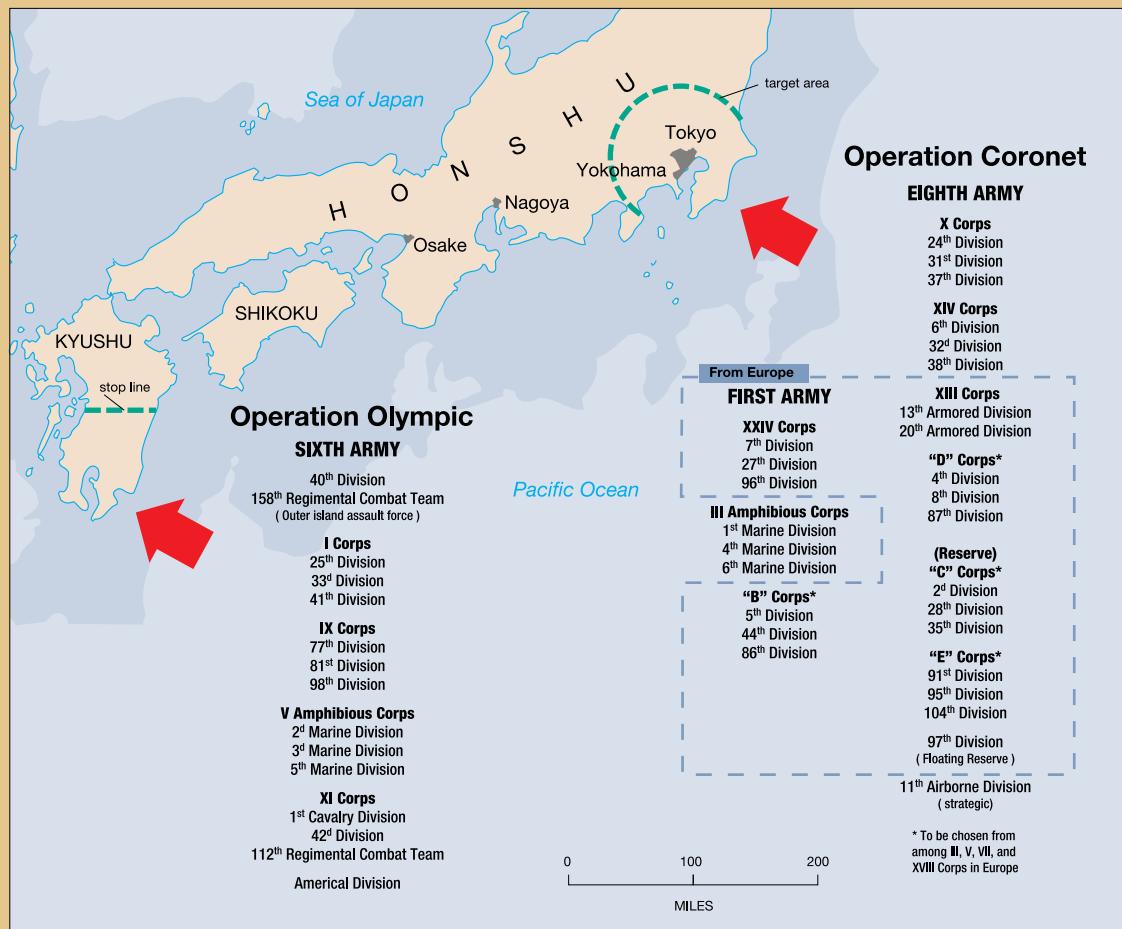
MacArthur had twice come up with figures exceeding 100,000 casualties for the first three months of combat on the southern island of Kyushu which Skates contrasts with President Harry Truman's post-war statement that Marshall had said that the casualties from invading Kyushu and Honshu—including the Kanto Plain and Tokyo—could range from 250,000 to 1,000,000. Even discounting the fact that the figures represent expected losses for the entire campaign in the Home Islands, Skates claims they exceed those which Marshall received from

MacArthur, asserting that "there is no substantiation beyond Truman's own memory." He adds that "a casual and informal estimate would have been out of character for Marshall, whose statements were always careful and measured." But it is possible that the President was telling the truth, and that the numbers given were indeed Marshall's "careful and measured" opinion.

When Marshall briefed Truman prior to the session on July 25 at the Potsdam conference, he was under no obligation to portray MacArthur's casualty figures as the last word. Both men were intimately familiar with losses in the Pacific over the previous year—over 200,000 wounded, plus 10,000 American dead and missing in the Marianas, 5,500 on and around Leyte, 9,000 on Luzon, 6,800 at Iwo Jima, 12,600 at Okinawa, and 2,000 killed in the unexpectedly vicious fighting on Peleliu. Both also knew that, save for some operations around New Guinea, real casualties were routinely outpacing estimates and the gap was widening. They also knew that while America always emerged victorious, operations often were not being completed as rapidly as planned—with all the added cost in blood and treasure that such lengthy campaigns entailed.

Leyte is a perfect example. It was to the Luzon campaign what the Kyushu invasion was to the capture of Tokyo, a preliminary operation to create a huge staging area. Today, we can recall MacArthur wading ashore triumphantly in the Philippines. But what Truman and Marshall knew only too well was that MacArthur was supposed to have retaken Leyte with four divisions and have eight fighter and bomber groups striking from the island within 45 days of the initial landings. Nine divisions and 60 days into the battle, however, only a fraction of that airpower was operational because of unexpected terrain conditions (and this on an island which the United States had occupied for forty years). Nor had fighting on the ground gone as planned. The Japanese even briefly isolated Fifth Air Force headquarters and also captured much of the Bunaen airfield complex.

Skates records incredulously that a figure of up to one million casualties far exceeded those sustained in Europe. But while the naval side of the Pacific War displayed the broad, sweeping moves so loved by historians, land combat had little in common with the maneuver warfare that went a long way toward keeping casualties comparatively low in northwest Europe. The closest commanders came after D-Day to corps-level combat which was the stock and trade of Army and Marine divisions in the Pacific was the prolonged fighting in Normandy's hedgerows and Huertgen Forest—close-in, infantry-intensive slugfests that produced many dead on both sides.

Provisional Order of Battle for Invasion of Japan (August 1945)

Source: General Headquarters, U.S. Forces in the Pacific, Operation Coronet Staff Study.

DATELINE:**MAINLAND JAPAN**

December 8, 1945.

(Associated Press)

U.S. forces land on Kyushu as smoke masks the beaches from kamikazes and shore batteries.



It is also important to note that when they met in Potsdam, Truman and Marshall knew that total U.S. casualties were approaching the 1,230,000 mark that Skates finds unfathomable, the bulk having occurred in just the previous year.

Marshall had MacArthur's figures on July 25, 1945, and had seen countless other well-intentioned estimates. He also appreciated that at some point the President—as any commander in chief might do—was going to ask him a question that would rely not only on the numbers in hand, but on his intuition and experience as a soldier. An artillery commander from the Meuse-Argonne battles of World War I would ask a man who had walked over the same bloody fields, "But general, what do you really think?"

A Time to Invade

There were plenty of estimates that confidently asserted that strategic bombing, blockades, or both—even the invasion of Kyushu alone—would bring Japan to its senses, but no one could provide a convincing explanation on how long that would take. The millions of Americans poised to take part in the largest invasion in history, as well as those supporting them, could only stay poised for so long. Leaders in both Washington and Tokyo knew this just as well as the theater commanders in the Pacific. After learning of the bomb, MacArthur ignored it save for considering how to integrate the new weapon into plans for tactical operations at Kyushu and Honshu if Tokyo was not forced to the surrender table. Nimitz was of a similar mind. On being

told that the bomb would become available in August, he reputedly remarked, "In the meantime I have a war to fight."

An article of faith among some critics of the bomb is that Truman and his advisors knew that Japan was on the ropes and would soon surrender. The reality in 1945 was vastly different and leaders at all levels worked under the assumption that the United States would go all the way to Tokyo the hard way. Construction of the massive prefabricated components of a portable harbor to support forces invading Honshu had a priority second only to the Manhattan Project which had produced the bomb. Stateside hospitals were readied for a flood of wounded.

Skates takes Truman and his contemporaries to task for considering casualty figures that "were without basis in contemporary planning" but asks readers to feel comfortable with his own estimate of a "tolerable" total of no more than 20,000 while confidently asserting that the Japanese would have surrendered posthaste before the invasion of Honshu. He makes much of a post-war report by Colonel Riley Ennis of the Operations Division of the War Department on how the war might have progressed absent the bomb. Ennis, a newly-promoted colonel, was tasked to produce this brief analysis, clearly put together in a hurry by someone whose heart was not in it. In a way, though, it actually does not differ much from numerous other documents produced after the war in that it was not based on original research and analysis but patched together from various sources that tended to be liberally salted with hindsight unavailable six months earlier.



Ennis guessed the number of casualties that would have resulted from invading Kyushu by essentially lifting MacArthur's original estimates and merging them with post-war sources such as a Sixth Army report on "Japanese Plans for the Defense of Kyushu." When reading this and other analyses, it is difficult not to notice that they follow the tendency to build scenarios or conclusions around the Japanese defensive strength of mid-August when pitted against U.S. offensive strength amassed in November. As with other such reports, a slight whiff of overoptimism is discernable. It concludes that casualties would have ranged from 75,000 to 100,000 for the Kyushu operation. But Skates then takes this figure, quips that his "study of the record leads to similar conclusions," and proceeds to reduce it to 60,000 to 75,000 without giving the reader a clue on how he did it.

The attempt by Skates to build a what-did-Truman-know-and-when-did-he-know-it case is all the more disingenuous when one learns that the author is aware that four days after Marshall's briefing came the July 29 change to an earlier report on enemy strength on Kyushu. This update set alarm bells ringing in MacArthur's headquarters as well as Washington because it stated bluntly that the Japanese were rapidly reinforcing Kyushu and had increased troop strength from 80,000 to 206,000 men "with no end in sight." Finally, it warned that Japanese efforts were "changing the tactical and strategic situation sharply." While the dramatic no end in sight

claim turned out to be wrong, the confirmed figures were ominous enough for Marshall to ponder scrapping the Kyushu operation altogether even though MacArthur maintained that it was still the best option available. With this in mind, the ratcheting down of potential casualties on Kyushu is all the more puzzling.

So what can be learned from *The Invasion of Japan: Alternative to the Bomb?* The author's remarkably low casualty estimate seems to derive from the well-documented weakness of Japanese forces as they existed 75 days—and, as will be seen, actually 105 to 120 days—from the invasion of Kyushu; an incomplete understanding of how Japanese defensive operations were conducted; an uneven application of logic on estimates of Japanese combat strength after a defeat on Kyushu; and an eager willingness to select and shape facts that support the thesis that U.S. forces would have suffered relatively few casualties in an invasion, and that Tokyo was ready to throw in the towel.

Naming the Day

The Joint Chiefs originally set the date for the invasion of Kyushu (Operation Olympic) as December 1, 1945, and for Honshu (Operation Coronet) as March 1, 1946. To lessen casualties the launch of Coronet would await the arrival of two armored divisions from Europe to sweep up the Kanto Plain before the valleys turned into vast pools of rice, muck, and water crisscrossed by elevated roads and dominated by rugged, well-defended foothills.

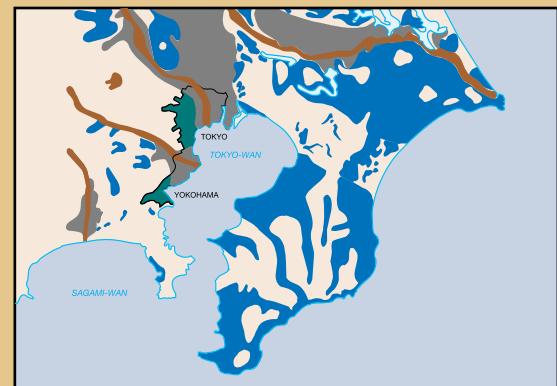


Before the British experienced the tragedy of pushing XXX Corps up a single road through the Dutch lowlands to Arnhem, U.S. planners were aware of the costs that would be incurred if the Kanto Plain was not secured for mobile warfare and airfield construction prior to the wet season. Intensive hydrological and weather studies begun in 1943 made it clear that an invasion in early March offered the best chance of success, with the situation deteriorating as the month progressed.

With good luck, relatively free movement across the plain might even be possible well into April. Unfortunately, this assumed that the snow run-off from the mountains would not be severe, or that the Japanese would not flood the fields.

While subsequent post-war prisoner interrogations did not reveal any plans to systematically deluge low-lying areas, a quick thrust up the Kanto Plain would not have been as speedy as Skates suggests. First, there were no bridges in the area capable of taking vehicles over 12 tons. Every tank, self-propelled gun, and prime mover would have to cross bridges erected for the event. Next, logistical considerations and the sequence of follow-up units would require that armored divisions not land until Y+10. This would provide time for the defenders to observe that the U.S. infantry's generic tank support was severely hampered by already flooded rice fields and would certainly suggest ways to make things worse for the invaders.

The Inundation of the Tokyo Plain—Areas of natural flooding in the wet season (shaded brown) and temporary artificial flooding (gray) are shown at left; combined areas of paddy fields (blue) and flooding form obstacles at right which indicate full impact of both natural and man-made barriers.



Source: Military Intelligence Section, General Headquarters, U.S. Army Forces in the Pacific.



A late start on Honshu would leave American forces to fight their way up flood plains that were only dry during certain times of the year but that could be suddenly inundated by the enemy. If the timetable slipped, U.S. soldiers and marines would risk fighting in terrain similar to that later encountered in Vietnam, less the helicopters, where convoys moved on roads above paddy fields. Unfortunately, foul weather would have delayed base development on Kyushu and spelled a late start for the operation.

Engineer planning for Coronet envisioned the construction of 11 airfields on Kyushu for the 31 air groups that would soften up Honshu. Bomb and fuel storage, roads, wharves, and base facilities would be needed to support those air groups plus Sixth Army holding a 110-mile "stop line" one third of the way up the island. All plans centered on construction of the minimum essential operating facilities, but that minimum grew. The 31 air groups increased to 40, then to 51—all for an island on which there was considerably less terrain information than was erroneously collected about Leyte. Many airfields would come on line early to support ground operations on Kyushu, but lengthy strips and support facilities for Honshu-bound medium and heavy bombers would only start to become available 45 days into the operation. Most were not projected to be ready until 90 to 105 days after the initial landings on Kyushu in spite of a massive effort.

The constraints on the air campaign were so clear that when the Joint Chiefs set the target dates of the Kyushu and the Honshu invasions

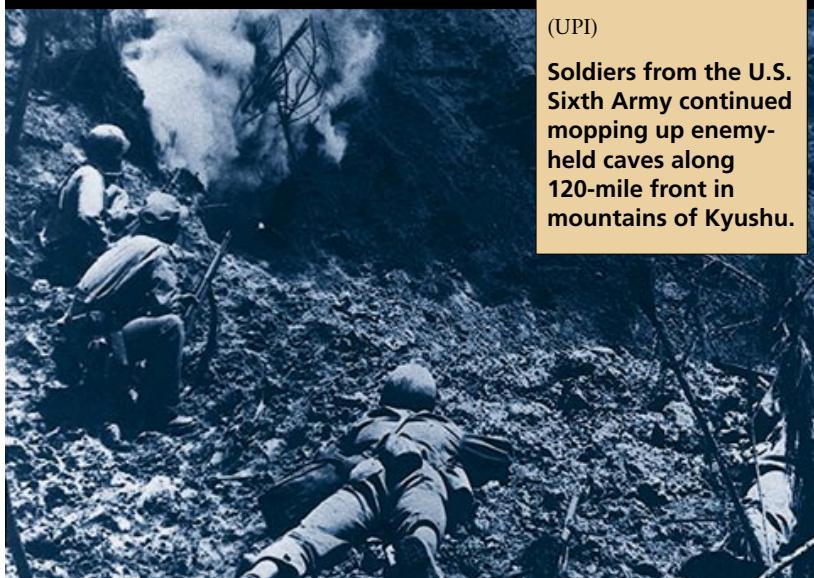
for December 1, 1945 and March 1, 1946, respectively, it was apparent that the three-month period between X-Day (Olympic) and Y-Day (Coronet) would not be sufficient. Weather ultimately determined which operation to reschedule because Coronet could not be moved back without risking serious restrictions on the ground campaign from flooded fields and the air campaign from cloud cover that almost doubles from early March to early April. MacArthur proposed moving the Kyushu invasion ahead by a month, Nimitz concurred, and JCS agreed. Olympic was set for November 1, which also gave the Japanese less time to dig in.

Yet these best-laid plans would not have unfolded as expected even if the atomic bomb had not been dropped and the Soviet entry into the Pacific War had not frustrated Tokyo's last hope of reaching a settlement short of unconditional surrender (a Versailles-type outcome was unacceptable to Truman and many of his contemporaries because it was seen as an incomplete victory that would require the next generation to refight the war). The end result would have been a bloody campaign in which pre-invasion casualty estimates rapidly became meaningless because of something that the defenders could not achieve on their own: knocking the detailed U.S. timetable off balance.

A Season for Kamikazes

The "divine wind" (kamikaze) of a powerful typhoon destroyed a foreign invasion force heading for Japan in 1281, and it was for this storm that Japanese suicide aircraft of World War II were

DATELINE:



KAGOSHIMA, JAPAN

June 1, 1946.

(UPI)

Soldiers from the U.S. Sixth Army continued mopping up enemy-held caves along 120-mile front in mountains of Kyushu.



named. On October 9, 1945, a similar typhoon packing 140-mile per hour winds struck the American staging area on Okinawa that would have been expanded to capacity by that time. Skates relates in a matter-of-fact way that U.S. analysts estimated that the storm would have caused up to a 45-day delay in the invasion of Kyushu—well beyond the initial date of December 1. The point that goes begging, however, is that while these reports from the Pacific were correct in themselves, they did not take account of what such a delay in base construction on Kyushu would mean for the Honshu invasion, which could have been pushed back as far as mid-April 1946.

If there had been no atomic bomb and Tokyo also had attempted to hold out for an extended time—a possibility that even bombing advocates grant—the Japanese would have appreciated the impact of the storm in the waters around Okinawa. Moreover, they would know what it meant for the follow-up invasion of Honshu which they predicted as accurately as the invasion of Kyushu. Even with the storm delay and friction of combat on Kyushu, the Coronet schedule would have led U.S. engineers to perform virtual miracles to make up for lost time and implement Y-Day as early in April as possible. But the “divine winds” packed a one-two punch.

On April 4, 1946, another typhoon raged in the Pacific, this one striking the northernmost Philippine island of Luzon on the following day, inflicting only moderate damage before moving toward Taiwan. Coming almost a year after the war, it was of no particular concern. But if Japan

had held out, this storm would have had profound effects. It would have been the closest watched weather cell in history. Would it move to the west after hitting Luzon, or would it take the normal spiraling turn to the north, and then northeast as the October typhoon? Would slow, shallow-draft landing craft be caught at sea or in the Philippines where loading operations would be put on hold? If they were already on their way to Japan, would they reach Kyushu’s sheltered bay? And what about the caissons for the artificial harbor? This precious towed cargo could not fall victim to the storm and be scattered at sea.

Whatever stage of employment U.S. forces were in during those first days of April, a delay of some sort—certainly no less than a week—was going to occur, one that First and Eighth Army could ill afford and that Japanese militarists would see as another sign that they were right after all. This is critical. Skates notes that much of the land today contains built-up areas not there in 1946, but appears blissfully unaware that anyone treading this same flat, dry “tank country” in 1946 would, in reality, have been up to their calves in muck and rice shoots by the time the invasion took place.

There is also the claim made by Skates of an “overrated” kamikaze threat. While it is not possible to discuss that subject here, one aspect is worth emphasizing: U.S. intelligence turned out to be seriously wrong about the number of Japanese planes available to defend the Home Islands. Estimates that 6,700 could be made available in stages by the final invasion grew to only 7,200 by the time of the surrender, but turned out to be



short by some 3,300 in light of the armada of 10,500 planes which the enemy planned to use in opening phases of both operations. The number actually available turned out to be over 12,700.

To bolster his case, Skates gives unusual weight to some reports. But all documents are not created equal. Thus when he uses a quick and dirty estimate by Ennis to refute the statements of Truman and Marshall, his argument appears to be rather shallow at first blush then turn disingenuous as it becomes clear that he is cloaking the report in terms that imply the existence of multiple sources: "The postwar analysts were certainly correct in their estimate that Coronet would not have been necessary." That sort of overstatement occurs with unnerving frequency, although the unwary reader likely accepts this documentation at face value because, while the basic outlines of invasion plans are understood, few have grasped their fundamental details.

Skates makes occasional obligatory acknowledgments to just how fierce the fighting would have been but is convinced it would have been brief with "tolerable" casualties only "in the range of Okinawa." Even if one appeals to the remarkably low casualty estimate that the author snatches from the air, it is reasonable to assume that if Truman had not done exactly what he did to end the war, many of the same people who today decry dropping the bomb might well be condemning him for needlessly expending thousands of American lives in an unnecessary invasion.

Military professionals will pick up on the strengths as well as the weaknesses of this book.

There is a fine chapter on the redeployment of First Army from Europe, a decent section on Pastel deception operations, and a sensitive account of plans for the possible use of poison gas during the invasion. Anyone with an ax to grind on the strategic, political, and moral questions surrounding the bomb, however, will find its flawed conclusions providential for conducting their private wars. Skates has said exactly what some might want to hear, but the fact remains that Truman was under no obligation to accept a figure of 200,000 (or "just" 20,000) American dead to assuage the guilt of the revisionists. **JFQ**

The photographs reproduced in this article depict the following actual events of the World War II: page 88, *USS Indiana* firing salvo at Imperial Japanese Iron Works in Kamaishi (U.S. Navy) and under a protective smoke screen American forces make a landing somewhere in the South Pacific, 1944 (U.S. Army); page 89, Marines landing in Japan (U.S. Navy); page 90, Marines invade Iwo Jima (U.S. Marine Corps/Neil Gillespie) and cleaning up on *USS Nashville* after kamikaze attack (U.S. Army); page 91, a flame-throwing tank of the U.S. 10th Army pouring it on a Japanese entrenchment on Okinawa (U.S. Army); page 92, enemy-held cave on Okinawa (U.S. Marine Corps/Thomas D. Barnett, Jr.) and flight deck of *USS Nassau* (U.S. Navy); page 93, Coast Guardsmen and troops filling sandbags for gun emplacement on Leyte Island (U.S. Coast Guard); page 94, discharged Japanese soldiers on board train (U.S. Navy/Wayne Miller) and members of the 151st Infantry Regiment advancing under enemy fire on Carabao in the Philippines (U.S. Army).

DATELINE:

KOBE

September 18, 1946.

Japanese soldiers captured by the 86th Infantry Division in Hyogo Province enroute to POW camp.

[U.S. Army Signal Corps photo]



JMETL: The Key to Joint Proficiency

By JOHN R. BALLARD and STEVE C. SIFERS

Modern warfare is joint warfare. Therefore the Armed Forces must train jointly in order to fight successfully. Unfortunately, today we face resource constraints that make it no longer possible to train each task to proficiency. The joint community, like the services, must determine which tasks are necessary and warrant training. To get the most out of available resources, objectives must be derived by assessing probable future operations. The joint community lacked the means to do that in the past; now the joint mission essential task list (JMETL) can make training more efficient in ensuring success.

As U.S. forces operate in a world of diverging threats and growing fiscal constraints, it is critical that training systems use the most effective requirements-based methods available. The full implementation of a joint training system rooted in joint mission essential tasks (JMETs) can make this possible. This article looks at including JMETs in training and readiness systems to improve joint proficiency in specific mission areas.

Background

JMETs benefitted from the Army experience in developing unit mission essential task lists (METLs). While

there are important differences between them, METL provides a foundation for JMETs.¹ The Army training model begins by assessing all the tasks that a unit may ever perform. A unit reviews its mission statement entered on the modified table of organization and equipment, any operation plans or orders against which it is force listed, guidance from higher headquarters, and Army publications. The assessment leads to a list of all possible tasks for a given unit.

Lists may be long, as in the case of a combat arms unit such as an armor battalion, or short for specialized units, as with a postal detachment. For most units this initial list has more tasks

than they can effectively train to given time limitations, much less fiscal constraints. Since there are some tasks to which units will be unable to train, let alone train to standard,² commanders must prioritize the list to select tasks which must be trained. This is also accomplished by reviewing the references mentioned and selecting the most likely combat tasks. These then become the mission essential tasks for a unit.

Next is determining how well trained a unit is for the items on a METL. A standardized assessment tool is necessary. The Army uses written conditions and standards for each task as the assessment tool. Currently there are conditions and standards for most tasks required.³ However, when the process began there were only limited published conditions and standards, and many of them varied from unit to unit.

The Army has an organization-wide process to standardize the names of tasks and related conditions and standards. This procedure will carry on in some form as conditions and standards shift with new information and technology. Conditions and standards become objective measures which a unit uses to assess when it is sufficiently trained for a task and can move on to others.

Assessments result in selecting tasks that units should include in their next training period. In theory units do not prioritize tasks on their METL. All should be of equal importance or not be on the list, since supposedly essential tasks should be trained to standard all the time. However, time, money, and unit priority make it difficult if not

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SH-60 picking up survivors of simulated crash.



U.S. Air Force (Sean Worrell)

impossible to train to standard on all METL tasks. Therefore units identify duties for which they are untrained or need practice as the focus of the next available training days. Unit proficiency in METL tasks should determine the requirement for training and form the basis of the unit training plan.

The Joint Process

The Army training model follows the precept that operational requirements should drive training. It ensues

we should train to fight in the joint environment just as we do in service-directed training

from the success of the Army process that joint operational requirements should also drive joint training. We should train the way we intend to fight in the joint environment just as we do in service-directed training. These precepts should be fundamental to every training plan.

Unfortunately, this has not been the norm since the passage of the Goldwater-Nichols Act. Too much of

the joint training conducted in the last nine years has used imprecise training vehicles. Training driven by large-scale field exercises that are based on artificial scenarios and held without detailed analysis to identify the appropriate tactics, techniques, and procedures as objectives rarely optimized resources or yielded focused training. While such exercises had utility and did produce benefits, they were too costly and inefficient to remain the norm. More seriously, some training vehicles have become mere sounding boards for developing doctrinal theories, using personnel as training support for initiatives that research and development has failed to address. Such practices must be replaced with a process that targets training to produce increased readiness with every dollar spent.

Practice does not make perfect, only perfect practice makes perfect. This applies to joint forces as well as service component forces. For joint organizations to measure their readiness they need to know what missions and tasks they will most likely perform in combat and in operations other than war. Then they need to know the standards for performance of these tasks and under what conditions they must execute them. Such a knowledge set provides the tasks, conditions, and

standards for the joint force METL. Effective training requires these parameters to give commanders objective measurements against which to apply themselves. This knowledge set will also give the joint forces a plan to allocate resources to achieve desired readiness levels. Instead of conducting large-scale, expensive exercises, the joint force commander needs to conduct focused training to assess the proficiency of his forces to conduct the tasks they will be required to perform in combat. With this assessment the commander can create a training plan to move the unit toward proficiency. This type of training requires standardized tasks, conditions, and standards at the joint level.

In the past most joint forces have been formed in an ad hoc manner. Despite this, key personnel in potential joint force headquarters have intuitively known what tasks were critical to mission accomplishment. In each case they have identified many of these tasks and set about accomplishing them, for the most part without direct guidance or assistance; but they could have been more effective had these tasks been identified in advance. It is time for the joint community to routinely publish task lists (JMETL) as well as the conditions and standards that go with each duty. Sufficient information is available to formulate conditions and standards for all joint forces from the lessons of former large exercises, after action reviews (AARs) on recent joint operations (such as Somalia and Haiti), and experiences of current CINCs and their staffs.

Ongoing Improvements

Deducing the essential from a list of all possible tasks for joint forces or units operating in a joint environment is the logical starting point for determining force JMETLs. Unfortunately, such a list does not exist. Analyzing the joint strategic capabilities plan (JSCP) and the complete file of operations plans is the best way to develop a list. This takes time and thought from key operations and plans personnel, but the resources to accomplish it are in place.

Navy and Air Force aircraft during Roving Sands '94.



Combat Camera Imagery (Delanie Statford)

The joint community has identified universal joint tasks to support training and listed them in the universal

in a resource-constrained environment we cannot train for tasks that we do not intend to perform in combat

sal joint task list (UJTL). Originally many were disenchanted because UJTL appeared to approach the requirements-based training from the wrong perspective, and its terminology was generic and lacked current joint usage. Also, there was not enough input from warfighting CINCs and too much work had been contracted; thus, the document was out of touch with techniques. Acceptance of the first UJTL version was also hampered by a lack of understanding of the process and potential uses. By the time most officers began to read about its operational tasks in section II, they had already lost confidence in the document.

Fortunately, significant improvement has been made in 1995, incorporating the best of the entire joint com-

munity. The result is an improved UJTL, version 2.1, which reorganizes the tasks to fit joint doctrine and reflects the input of all unified commands. The new UJTL can and should empower the requirements-based system of the future.

Beyond UJTL, precise tasks must drive the joint training program. But the program must also reflect warfighting priorities to maximize readiness in a period of resource reductions. Among these goals are:

■ *Matching specific tasks to specific audiences.* While multi-echeloned training is possible, the joint community no longer has resources to conduct it worldwide. Training events must aim at a particular level of joint training and at the units or staffs which must execute the missions that the training supports. This is the core of the U.S. Atlantic Command (ACOM) training program.

■ *Avoiding duplicating training accomplished at service component level.* The services are capable of producing trained, interoperable units, and conducting interoperability training. Service training can support joint requirements, and when conducted and assessed, service exercises should form a large portion of the joint readiness system. The only thing lacking is a means to account for joint tasks accomplished in service training. While these two tenets may lead one to rely heavily on simulation and modeling to train higher level joint organizations, nothing beats the real thing. It is still productive to shake out an entire joint organization when the mission and force readiness levels warrant, even at considerable cost.

■ *Avoiding interference in service training.* The services must stay proficient in required tasks as a foundation for joint training and operations. Likewise, service training must not be used as an excuse for not conducting joint training. A balance must be struck since both are essential.

■ *Orienting only on essential tasks.* In a resource-constrained environment we cannot train to tasks that we do not intend to perform in contingencies and combat. Exercises and other training events that do not

directly contribute to readiness requirements must be deleted from joint training. The prioritization of exercises and training must begin with a JMETL for supported commanders. JFCs must weed out adventure training and roll all resources into mission-required training.

Completing the Process

The first step toward solving this problem has been the development of militarily precise joint tasks that bridge the full spectrum of warfighting from strategic through tactical levels. This started with a simple mission analysis of tasks identified in the JSCP for each warfighting CINC. Then theater staffs applied their in-depth knowledge of the culture, history, and geography of their areas of operations to identify essential capabilities. Many essential tasks are not joint, and many joint techniques and procedures will not be essential to a specific geographical area.

Since JSCP taskings have been used to identify strategic tasks at the theater level, operations plans (OPLANS) can be used to define area of responsibility (AOR)-specific operational and even tactical tasks required by a CINC's theater strategy. Each theater has its own force requirements and operational tasks reflected in OPLANS. Such plans are continually updated to reflect methods required to obtain a CINC's objectives. In most cases specific essential tasks can be identified. These tasks can become JMETs for forces assigned in the individual OPLANS.

UJTL can then serve as the menu to form subordinate force JMETLs for designated joint force commanders. The list of JMETs for an AOR should reflect plans that are critical to a regional strategy and reference joint tactics, techniques, and procedures that have proven successful.

Even with sound JMETs, most joint trainers must significantly reorient their instruction to maximize its effect on a specific audience. This means that command post or computer assisted exercises are the best way to train for strategic and operational tasks. Field training exercises are good vehicles for accomplishing certain tasks, but they are wasteful if used to practice strategic or operational planning tasks. Though computer

technology may appear expensive, its use over the long term is much more economical and precise than deploying large numbers of soldiers, sailors, airmen, and marines to act out "big blue arrows."

Once essential tasks are identified and training is redesigned for the ap-

joint training in the next century will generate a process for standardizing essential tasks

propriate audiences, the final step is to develop supporting conditions and standards to measure and standardize training effectiveness. Conditions and standards make objective feedback possible, and that completes the process by returning results and lessons learned into the design stage of training development that strengthens weak areas and incorporates capabilities into future employment planning.

Challenges Overcome

The volume of possible joint tasks makes the development of JMETs a challenge, although the scope of concurrence needed to fully implement the program was expected to be the greatest obstacle. Not only did the different theater CINCs have to reach consensus on what tasks are truly joint, but the services had to agree to train these joint tasks in addition to their own service METL. Both challenges have been met and the Navy and the Air Force have even started to design service METLs to support the joint system.

Almost as challenging was bridging the language barrier that plagues many joint projects. Even if various staffs agree on what is fundamentally joint and essential, producing plain language descriptors at all levels to account for service culture, capabilities, and techniques while reflecting joint doctrine will be an awesome task.

Finally, the support of the Chairman and the joint force integrator mission of ACOM have greatly facilitated institutionalizing JMETL among theater staffs and service components. Although some were skeptical of the

ACOM role, practice and limits on resources outside CONUS validate the need for JFCs to achieve joint integration in the United States before their forces deploy. The Chairman has made JMETL development a priority, and this focus has been strongly supported by the services and CINCs. The design and development of the required tools to begin requirements-based

training is complete. All that remains is to educate personnel at all levels on the benefits of the system and complete the honing of the joint exercise program.

Joint training in the next century will be requirements-based. This will generate a process for defining and standardizing essential tasks so that limited resources are allocated based on need. Perceived trends will eventually provide commanders with a basic tool to assess joint readiness. In turn, JMETs will impact on training, focusing efforts more on tasks and forces requiring specific training emphasis. This will have a positive effect on battle space proficiency of joint forces.

JMET development is vital to improving joint training and readiness and should be widely discussed. Training funds are becoming the sole discretionary resource. Their efficient use will be critical to the readiness of forces whose proficiency will be essential to victory in the battle space. The Armed Forces need a means of assessing joint proficiency and plan training. Fully developed JMETLs, with associated conditions and standards as discussed here, are the right tool and the best path today for joint training. **JFQ**

NOTES

¹ See FM 25-100, *Training the Force*, and FM 25-101, *Battle-Focused Training*.

² In the Army system the standard for a task is frequently a specific goal (such as the time required to complete a road march), whereas under the joint system the standard may be described in terms of a measure of mission accomplishment.

³ The Army is still refining the process of conditions and standards. See H. Hugh Shelton and Steven C. Sifers, "Standardized Training Assessment," *Military Review*, vol. 74, no. 10 (October 1994), p. 5.

Beyond the Range of Military Operations

By ANN E. STORY and ARYEA GOTTLIEB

Doctrine must be clear and logical. However, the current joint doctrine model, known as *the range of military operations*, is confusing and ambiguous and should be replaced. It is time to move beyond the range of military operations in search of a model that properly portrays the Armed Forces as the military instrument of national power. Toward that end, a new model entitled *the military operational framework* is proposed here. It signifies a return to basics in combat and noncombat operations, as well as the continuing preparation needed for both.

Adopting a new model is the next step in an evolutionary doctrine development process that will ensure our forces can respond to any challenge. The proposed model may not be the ultimate solution, but it is a necessary move in the right direction. Before presenting this model, a review of the range of military operations, concentrating on the concept of military operations other than war (MOOTW is appropriate). In addition, it is necessary to explain how the concept of low intensity conflict (LIC) evolved into military operations short of war and

quickly changed into MOOTW. This leads to an examination of the lack of a framework, which is a flaw in joint doctrine, and how one service has addressed the flaw with a concept of MOOTW groupings. Finally, the proposed model will be explained and the joint doctrine hierarchy addressed.

The Range of Military Operations

The term *the range of military operations* was first introduced in Joint Pub 3-0, *Doctrine for Joint Operations*, and in

MOOTW fails to provide the fundamental principles required in joint doctrine

operations other than war may imply that personnel are not put in harm's way in these operations. But one needs only to remember the October 1993 tragedy in Somalia to understand that MOOTW and casualties are not mutually exclusive; indeed, violence occurs in many of these operations.

The reason for the confusion should be apparent. MOOTW is an ambiguous concept that fails to provide the fundamental principles required in joint doctrine and is thus flawed. The model known as the range of military operations is therefore also faulty.

Low Intensity Conflict

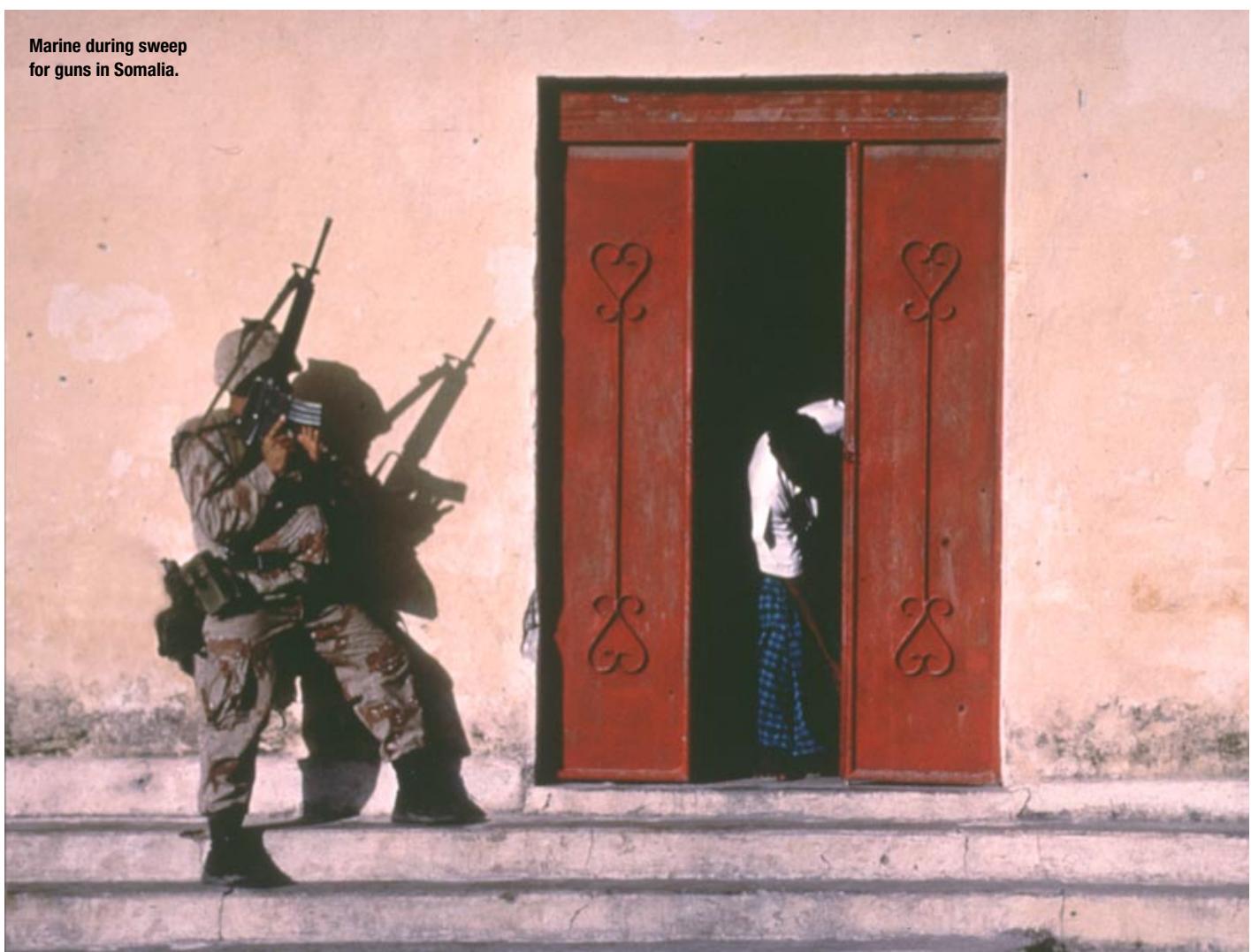
The process of writing Joint Pub 3-07 began in the late 1980s at the Army-Air Force Center for Low Intensity Conflict (CLIC) at Langley Air Force Base, Virginia. In 1991 the Joint Doctrine Center (now the Joint

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Joint Pub 3-07, *Joint Doctrine for Military Operations Other Than War*.¹ The model consists of two parts, war and military operations other than war. The model indicates that war is principally combat but also may include noncombat operations.² It presents MOOTW as principally noncombat but indicates that it may be combat. What is the difference between combat MOOTW and combat as a part of war? Moreover, what is the difference between noncombat war and noncombat MOOTW? Finally, is it possible to pronounce the acronym MOOTW? Adding to this confusion is the fact that some prefer to use the acronym OOTW.

War is clearly combat, but part of the ambiguity with the current model is that although the term *war* is discussed in joint doctrine, it is not defined. This makes it difficult to understand the *other than war* portion of the range of military operations, especially since both war and MOOTW may be combat or noncombat according to the model. For the uninitiated, *military*

Marine during sweep
for guns in Somalia.



Combat Camera Imagery (Perry Heimer)

Warfighting Center) conducted the two-phased evaluation of a test version of Joint Pub 3-07 to validate its contents. One phase was a worldwide survey and the other was JCS Exercise Balikatan held in the Philippines. While both phases validated the document, the exercise made it clear that its title, *Doctrine for Joint Operations in Low Intensity Conflict*, was misleading. According to the exercise report, that was because it did "not accurately describe the contents of the publication and... [was] potentially offensive to host nations."³

Not only was the term LIC repugnant to other nations (challenging *their* national survival is anything but low intensity), but it started to lose favor for other reasons. One was that it

tended to imply Cold War or counterinsurgency. Another reason was that the lengthy definition of LIC⁴ revolved around protracted struggles, generally in the Third World, but failed to say what the United States would do in response. Finally, while in common use, the term was absent from the language of other agencies, notably the Department of State. This presents a stumbling block in the 1990s, the decade of interagency cooperation.

Intermediate Step

As the originator of Joint Pub 3-07, CLIC proposed a new term, *military operations short of war*, to subsume LIC. They then revised the publication. This

was within its charter, which makes CLIC the focal point for Army and Air Force matters relating to military operations in low intensity conflict. The revision reoriented the pub from Cold War to post-Cold War issues such as forward presence, crisis response, and the emergence of ethnic rivalries.

Even with a revised focus, the post-Cold War version of Joint Pub 3-07 was similar in its format to the Cold War version. Both used *operational categories* to frame the concept and focus attention, but there are significant differences. First, the category of *peacekeeping operations* was redesignated *peace support operations* to coincide with the British term, and ensuing draft versions shortened it to *peace operations*. This change to peace (support)

Figure 1. Military Operations Other Than War

Support and Assistance	Nonviolent	Forceful
Domestic Support Operations	Arms Control	Enforcement of Sanctions
Foreign Humanitarian Assistance	Show of Force	Enforcing Exclusion Zones
Nation Assistance*		Protection of Shipping
Support to Insurgency*		Strikes and Raids

Combatting Terrorism		
Counterdrug Operations		
Ensuring Freedom of Navigation		
Noncombatant Evacuation Operations		
Peace Operations		
Recovery Operations		

*Note: The United States reserves the right to use force during support to counterinsurgency (part of nation assistance) and during support to insurgency when it is in its interest to do so.

operations led to discussion of its military components, peacekeeping and peace enforcement. Second, DOD support to counterdrug operations became a separate operational category rather than remaining buried under contingency operations. Third and perhaps most notable, the term *LIC* was replaced by the more encompassing *military operations short of war* based on the November 1991 version of Joint Pub 1, *Joint Warfare of the U.S. Armed Forces*.⁵

The new term was quickly challenged because it inadvertently implied that postwar actions (such as *Provide Comfort*) were excluded. Also, the term *short of war* suggested that disaster responses (such as domestic cleanups after hurricanes) were not included. Both claims were valid, so *military operations short of war* was changed to *military operations other than war*. Moreover, a definition was proposed for the new term that stated not only what it is but what it is not.⁶

The Next Step

A later version had a condensed MOOTW definition⁷ and one visible difference that at first glance appeared cosmetic, the elimination of operational categories that had served as a framework. Joint Pub 3-07 contained 16 *representative* types of MOOTW: arms control, combatting terrorism,

counterdrug operations, domestic support operations, enforcement of sanctions, enforcing exclusion zones, ensuring freedom of navigation, humanitarian assistance, nation assistance, noncombatant evacuation operations, peace operations, protection of shipping, recovery operations, show of force, strikes and raids, and support to insurgency.

The introduction to Joint Pub 3-07 states that some military operations other than war involve the use or

in any military operation self-defense may be necessary and there could be casualties

threat of force while some do not. The terms *combat MOOTW* and *noncombat MOOTW* are also used in subsequent paragraphs. However, neither the structure nor substance is developed further. In a chapter detailing different types of MOOTW, there is no attempt to indicate which side of the structure (force or no force) applies to given operations.

It is apparent that the MOOTW concept (a list of operations without

categories or structure) is flawed, but that does not mean the explanation of any of the various types of MOOTW is necessarily defective; but rather it is the *concept* of MOOTW that is in error. An alphabetical list of 16 items is just that. It neither associates an operation with a common purpose (such as combat or noncombat) nor focuses on the appropriate military role. For example, there is a vital difference between airpower for a show of force and for enforcing an exclusion zone. In other words, one cannot easily grasp the ambiguous MOOTW concept that was recently approved as joint doctrine.

MOOTW Groupings

A framework is needed to clarify how the military instrument is used in non-war situations. An example consistent with current joint doctrine is found in the second draft of Air Force Doctrine Document 3, *Military Operations Other Than War*.⁸ This framework consists of three MOOTW groupings—support and assistance, nonviolent, and forceful—as shown in figure 1. The intent of an operation, not the possible level of force, is the characteristic that places it within a group. The rationale behind the proposed MOOTW groups, in addition to providing the framework that was alluded to earlier, is to make it easier to understand the role of the Armed Forces

(particularly airpower and spacepower) in non-war operations. Of the various types of MOOTW, 10 clearly fit into one of the groups; the remaining six overlap between the second and third, depending on the situation.

The intent of the first group, as its name implies, is for the military to provide support and assistance. This does not necessarily mean the environment in which the operation is conducted is sterile or calm; certain risks may be unavoidable. As in any military operation, appropriate self-defense actions may be necessary, and there could be casualties. One example of domestic support operations was the multiservice response to the April 1995 bombing in Oklahoma City.



Air National Guard (Mark A. Moore)



U.S. Air Force (Tara R. Hamilton)

The second group includes operations in which the *intent* is to be non-violent. As with the first, this does not mean the environment is sterile or calm. Personnel should always be prepared to take appropriate defense measures for themselves, and commanders must always be prepared to defend their units. Again, casualties may occur. While the intent of operations in this group is to be nonviolent, a strong military presence is appropriate. Desert Shield is a classic case of a show of force that was active in nature but had a nonviolent intent.

The third group includes operations where the intent is clearly to be forceful. This is military power in the classic sense, bombs and bullets on target against an enemy. In recent years, our forces have participated in all four types. One example is Operation Southern Watch, initiated in 1992 to enforce an exclusion zone prohibiting Iraqi air operations in the established no-fly zone.

Completing the figure are the six operations that do not always fit neatly into any one group (shown in the lower right corner of figure 1). Depending on the situation, they may be nonviolent or forceful. For example, a

noncombatant evacuation operation may be unopposed in one situation and opposed in another. Overlap can also occur if the situation deteriorates to require force beyond self-defense. For instance, a peacekeeping operation (which is a component of peace operations) is assumed to be nonviolent. If the negotiated truce that established the operation is violated by any of the parties to the conflict, or if any party withdraws its consent for the operation, there may be an abrupt transition to peace enforcement (also a component of peace operations).

The concept of MOOTW groupings is a step in the right direction, but may not be the ultimate solution. The groups deliberately stop short of taking the next step because the service doctrine writer wanted to maintain consistency with approved joint doctrine. The next step is to acknowledge that the MOOTW concept, for the reasons already cited, is flawed. Therefore, by extension the range of military operations is also flawed. The corrective action lies not in attempting to refine the MOOTW concept, but in discarding it and moving beyond the range of military operations.

The Military Operational Framework

The hour has come to take that next step. However, this is not the first time steps were taken to change joint doctrine. The authors of the current Joint Pub 3-0 made a bold move when they replaced the operational continuum (peacetime competition, conflict, and war) with the range of military operations. The current joint doctrine model divides military operations into war and MOOTW without providing for any overlap. In addition, while the accompanying text in Joint Pub 3-07 explains that operations may occur simultaneously, this point is not clearly illustrated in the model due to its "boxlike" appearance. Once an operation is "put into a box," it should not be "confined" to the box as is the case with the current model.

While the current model includes the terms *combat* and *noncombat*, they are not the basis for the range of military operations; war and MOOTW are

the two components. It is time for a model that accurately portrays the military instrument of national power in a framework that focuses on both combat and noncombat operations. This model must allow for overlap, a fluid transition from one operation to another, and numerous simultaneous operations at any given time. Also, it must include a solid foundation of continuing preparation. Our proposed model (the military operational framework) is depicted in figure 2 using a variation on a Venn diagram.

The military operational framework consists of intersecting areas (combat operations and noncombat operations) supported by a solid foundation of preparation. Broken lines surrounding the overlapping area (shown in green below) allow for a fluid transition from one operation to another and delimit the area in which an operation may be combat or noncombat. They also allow for simultaneous operations.

The left side of the operations portion consists of actions that involve combat. *Retaliatory actions* (formerly strikes and raids) are punitive measures to destroy an objective for political or military purposes. The reason for a new title is that current definitions are indistinguishable and are sometimes used interchangeably. Doctrine developers carefully vet definitions in classifying an operation as a strike or a raid

but still confuse the two. For example, Operation El Dorado Canyon (against Libya in April 1986) is termed a strike or a raid in Joint Pub 3-0. For clarity, these terms should be combined. An *operation to restore order* is what is now known as a *peace enforcement operation* (part of peace operations). Since peace enforcement is a misnomer the new title focuses on intent and places it in the context of a volatile and uncertain situation that is not peaceful.

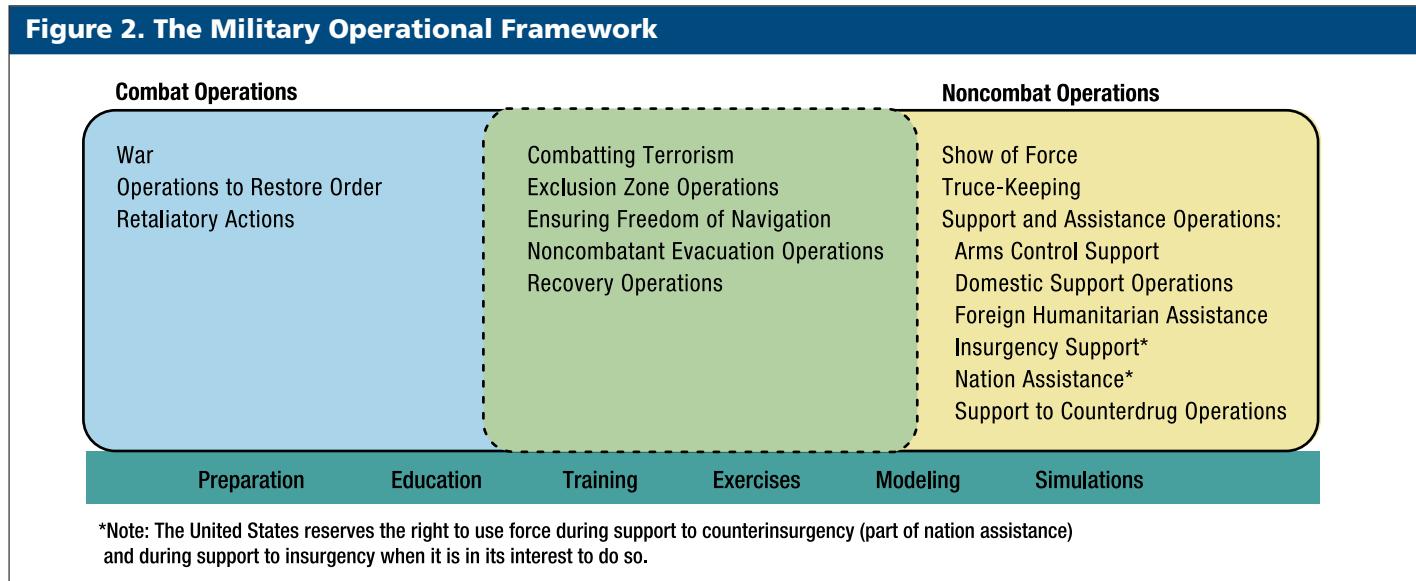
The right side of the noncombat operations portion of figure 2 consists of actions that are clearly not intended to involve combat. But some risks are unavoidable and casualties may occur. Personnel should be prepared to take appropriate self-defense measures, and commanders should be prepared to defend their units. *Truce-keeping* replaces what is known as *peacekeeping*, another misnomer. There is no peace to keep; instead a negotiated truce between the parties to a conflict is maintained. This is not apparent when the misnomer is used—redesignating the operation as truce-keeping clarifies its real objective and emphasizes its unpeaceful atmosphere. The intent of *support and assistance operations*, as the term suggests, is the provision of military support and assistance for domestic and international purposes. (Support to insurgency is included since military

advice, training, and logistics are provided though forces do not normally actively engage in insurgencies.) In noncombat operations the military is used in so-called nontypical or nontraditional military roles.

Operations in the intersecting area are actions that, depending on the situation, may or may not involve combat. Therefore, personnel must be ready to conduct combat operations quickly. If combat is unavoidable, U.S. forces will have both the right equipment and appropriate mindset. Exclusion zone operations consist of what is known as *enforcing exclusion zones* (prohibiting specified *activities* in given geographic areas) and *enforcement of sanctions* (stopping movement of designated *items* into or out of given areas). The operations are similar, and like strikes and raids are often confused. For clarity, they too should be combined. Freedom of navigation operations include not only this type of operation as described in Joint Pub 3-07, but also what is known as *protection of shipping*. Again, they are similar and should be combined.

As noted, underlying each operation is a solid foundation of education, training, exercises, modeling, and simulations. They are essential in preparing to conduct operations anywhere in the military operational framework at any time. Moreover, the foundation enables mental and physical preparation to meet future operations, analyze

Figure 2. The Military Operational Framework



*Note: The United States reserves the right to use force during support to counterinsurgency (part of nation assistance) and during support to insurgency when it is in its interest to do so.

Figure 3. Existing Joint Doctrine Hierarchy

Joint Pub 3-0	Doctrine for Joint Operations
Joint Pub 3-07	Joint Doctrine for Military Operations Other Than War
Joint Pub 3-07.1	JTTP for Foreign Internal Defense
Joint Pub 3-07.2	JTTP for Antiterrorism
Joint Pub 3-07.3	JTTP for Peacekeeping Operations
Joint Pub 3-07.4	JTTP for Counterdrug Operations
Joint Pub 3-07.5	JTTP for Noncombatant Evacuation Operations
Joint Pub 3-07.6	JTTP for Foreign Humanitarian Assistance
Joint Pub 3-07.7	JTTP for Domestic Support Operations

Figure 4. Proposed Joint Doctrine Hierarchy

Joint Pub 3-0	Doctrine for Joint Operations
Joint Pub 3-0.1	JTTP for Operations to Restore Order
Joint Pub 3-0.2	JTTP for Antiterrorism
Joint Pub 3-0.3	JTTP for Noncombatant Evacuation Operations
Joint Pub 3-0.4	JTTP for Truce-Keeping
Joint Pub 3-0.5	JTTP for Domestic Support Operations
Joint Pub 3-0.6	JTTP for Foreign Humanitarian Assistance
Joint Pub 3-0.7	JTTP for Foreign Internal Defense (part of nation assistance)
Joint Pub 3-0.8	JTTP for Support to Counterdrug Operations

current operations, and learn lessons from recent operations and apply them in the future.

Joint Doctrine Hierarchy

The proposed model to move beyond the range of military operations into the operational framework impacts on the hierarchy of joint pubs but not as significantly as might be expected. It is likely that the same number of publications will be needed, but with a revised focus. Currently, there are two pertinent sources of doctrine—Joint Pubs 3-0 and 3-07—as well as seven volumes of supporting joint tactics, techniques, and procedures (JTTP) which are listed in figure 3.⁹ The two doctrine pubs should be consolidated into a new version of Joint Pub 3-0 which retains the title of *Doctrine for Joint Operations*. It need not be lengthy, but it is important to put all doctrine in one document to avoid duplication and faulty perceptions of combat and noncombat operations.

At least eight JTTPs are necessary which will call for a new numbering system (some will also require new titles). Since they will be subordinate to Joint Pub 3-0, these JTTPs should be numbered 3-0.1 through 3-0.8 (see figure 4). This does not include JTTPs which may be required (such as exclusion zone operations). Future JTTPs must be formally proposed and approved for subsequent development at

semiannual meetings of the Joint Doctrine Working Party. Additional JTTPs would be numbered 3-0.9 and so forth.

When Joint Pub 3-0 undergoes assessment the range of military operations as well as the MOOTW concept should be rescinded. A revision should focus on a model of combat operations and noncombat operations with a solid foundation on preparation. After the revision, the subordinate JTTPs can also be revised as needed and then renumbered during their assessments.

The end of the Cold War brought new challenges which require that joint doctrine clearly and logically explains how the military instrument of national power is used. The model discussed herein may not be the solution, but it is a step in the right direction. It begins the quest for a new model to replace the range of military operations and the ambiguity of the MOOTW concept. Lest it go unsaid, the recent approval of the long-overdue Joint Pub 3-07 is commendable. Though the MOOTW concept is flawed, Joint Pub 3-07 was sorely needed. The assessment process and the subsequent revision of Joint Pub 3-0 can correct this flaw.

This is not a call for immediate changes in joint doctrine. Rather, it is simply the search for a model that properly represents the Armed Forces as the military instrument of national power. Doctrine, particularly joint doctrine, must focus on the fundamental principles of combat operations as well as noncombat operations to support national interests. It is time to take a

bold new step by moving beyond the range of military operations and into the military operational framework. **JFQ**

NOTES

¹ Since Joint Pub 3-07 has been recently approved but not distributed, this article has been based on the final coordination copy (December 22, 1994).

² The reformatted Joint Pub 3-0 (February 1, 1995) drops the noncombat portion of war from the model, although the MOOTW portion remains confusing and ambiguous.

³ Letter, Joint Staff (J-7), 00965A-92, subject: "Final Evaluation Report of Joint Test Pub 3-07, Doctrine for Joint Operations in Low Intensity Conflict," June 3, 1992.

⁴ See Joint Pub 3-07 [test], October 1990, p. GL-6.

⁵ The January 10, 1995 version uses the term *military operations other than war* rather than *military operations short of war*.

⁶ See Joint Pub 3-07 [draft final pub], April 10, 1993, p. GL-13.

⁷ Joint Pub 3-07 [final coordination], December 22, 1994, pp. GL-3, GL-4.

⁸ The draft is dated April 3, 1995.

⁹ Now that Joint Pub 3-07 is approved, the Joint Staff has issued a program directive to change Joint Pub 3-07.3 to *JTTP for Peace Operations*, thereby including peace enforcement.



U.S. Navy (Terry Mitchell)

Lessons Unlearned: Somalia and Joint Doctrine

By C. KENNETH ALLARD

As the Armed Forces prepare for new peacekeeping assignments, the lessons learned from operations in Somalia continue to have cutting-edge relevance. Some of those lessons were clearly learned and applied in Haiti, while others dominate planning for any Bosnian deployment. These specific insights are important for current and future operations, but our experience in Somalia also highlighted the enduring problem of effectively integrating joint operations. Despite the difficulties of working with the United Nations and coalition partners in a new, demanding class of missions, U.S.

forces were beset by deficiencies in joint operations which persist ten years after passage of the Goldwater-Nichols Act.¹ The larger lesson of the book on which this article is based, *Somalia Operations: Lessons Learned*, is that we must forge closer links among three processes: the way we plan operations, the way we draw lessons from those operations, and the way we apply the lessons in formulating joint doctrine.

Old Lessons, New Realities

Unified command is one of the oldest problems in joint operations, but there is widespread agreement that the concepts of unity, simplicity, and operational control underpin any command structure. However, during U.N. Operations in Somalia (UNOSOM) II there were three de facto chains of

command, namely, the United Nations, U.S. Central Command (CENTCOM), and U.S. Special Operations Command. As arduous as it was for CENTCOM to exercise operational control over various coequal units in a theater that was 9,000 miles from headquarters, the arrangements reflected the need to keep U.S. forces far removed from the reality or appearance of direct U.N. command. They also confirmed the relevance of standing doctrine and a lesson that should be added to Murphy's laws of armed combat: "If it takes more than ten seconds to explain the command arrangements, they probably won't work."

Another chronic problem was joint task force (JTF) organization. Even though JTFs have represented a balance between continuity of command and the integration of additional capabilities for more than fifty years, striking that balance in Somalia was a surprisingly random process. The humanitarian assistance survey team sent to coordinate the initial airlift had

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barely arrived before being redesignated as the JTF for complex and dangerous operations that lasted six months. Built around the nucleus of a Marine headquarters, the JTF that controlled United Task Force (UNITAF) gave way after a difficult transition to the hastily formed UNOSOM II staff.

The officers forming this staff had been individually recruited from Army units worldwide and only a third of them had arrived in-country by the time their mission was launched. When a JTF was added to UNOSOM II in the wake of the firefight in which

communications is the critical link in operations

18 Americans died, the 10th Mountain Division provided the nucleus with less than two weeks from initial notification to in-country hand-off and few organic capabilities for conducting joint or multinational operations. These difficulties were overcome through dedication, hard work, and professionalism of those sent to do a tough job. But the worrisome fact is that, during the period of UNOSOM II alone, U.S. forces also engaged in a dozen other major operations that required forming JTFs—from enforcing a no-fly zone over Iraq to providing flood relief at home in the Midwest.

Communications is the critical link in operations. While no Grenada-style interoperability fiascoes arose in Somalia, there were some similarities. For example, the same series of Army and Marine tactical radios had compatibility problems because of differing modernization and upgrade cycles. For the few weeks Navy ships were offshore, the Army hospital in Mogadishu could not talk to them nor were Army medical evacuation helicopter pilots cleared to land on them. Another problem was the stovepiping of different data systems. At the height of American involvement in a country that lacked even a functioning telephone system, at least *ten* different data systems were in use. Most were built on single service requirements but handled a host of common functions: intelligence, personnel, logistics, and even finance. Each system brought

its own logistical tail and competed for lane space on a narrow information highway—primarily the commercial INMARSAT satellite at a cost of six dollars per minute.

Another constant in joint operations is the planning process, especially as it influences force deployment and lift. While the joint operations planning and execution system (JOPES) forms the basis of that process, moving and sustaining the forces sent to Somalia revived the friction between the discipline needed to run the system and the flexibility demanded

by warfighters. A great effort was required to reconcile bookkeeping methods for tracking Army units with the airlift deployment data to move them. Even so, telephone calls, faxes, and repeated visual checks were necessary to insure that the “ramp reality” agreed with airlift requirements in the automated data base. Similar problems afflicted sealift. Through a sad combination of rough

seas, inadequate port intelligence, and delayed deployment of transportation specialists, three Army pre-positioned ships spent weeks shuttling between East African ports. Two eventually returned to Diego Garcia without unloading their cargoes, a disturbing shortcoming in an environment which was austere but not the scene of combat operations.

While Somalia certainly illustrated the persistence of old problems, it also demonstrated the continuing importance of mission analysis in adapting existing capabilities to new circumstances. Several of those innovations may serve as precedents for the future:

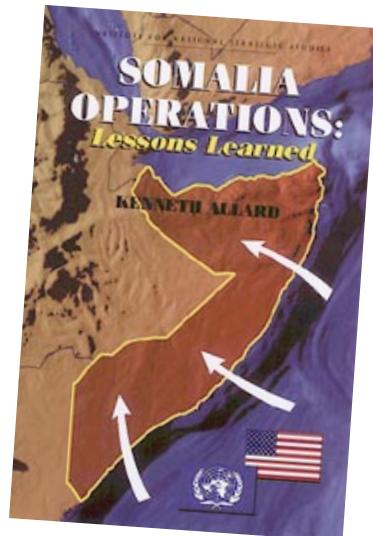
Rules of engagement. Though common to every operation, ROE are especially important if the objective is to limit the level of violence. Somalia had the virtue of keeping ROE simple, direct, and unclassified so that they were as well understood by the local people as by the peacekeepers.

NOW IN ITS SECOND PRINTING

Somalia Operations: Lessons Learned

by Kenneth Allard

...there should be no mistaking the fact that the greatest obstacles to unity of command during UNOSOM II were imposed by the United States on itself. Especially at the end of the operation, these command arrangements had effectively created a condition that allowed no one to set clear, unambiguous priorities



Washington: National Defense University Press, 1995.

113 pp. \$4.25
[ISBN 0-16-045577-4]

For sale by the Superintendent of Documents
[GPO stock no. 008-020-01352-8]

MEDCAP in Somalia.

U.S. Air Force (James Mossman)



U.S. Air Force (James Mossman)

Disarmament. During UNITAF, peacekeepers confiscated only weapons seen as a threat to the force, for example, crew-served weapons and arms caches. Disarming Somali clans, however, was a nation-building objective of UNOSOM II. The ensuing hostilities suggest that employing forces to disarm a populace is to commit those forces to a de facto combat mission as active belligerents.

Civil-Military Operations Center. Established early in UNITAF, this center was one of the most significant innovations of the operation. An outgrowth of the standard military approach to the liaison function, it became an invaluable way of coordinating information and activities between the JTF, multinational contingents, and 49 different international agencies operating in Somalia.

Mission Creep. Although much has been written on mission creep in Somalia, it is clear that the major changes in mission and direction came from the national command authorities. The object lesson for the future is that military leaders have a critical responsibility to select milestones that

best indicate mission success or failure. Many indicators in peace operations will differ from those in more conventional scenarios. But all must answer two critical questions: What is the mission and how will we know when we have accomplished it?

JULLS But Not Gems

The book, *Somalia Operations: Lessons Learned*, was principally based on those operational reports compiled through the joint universal lessons learned system (JULLS). This system has been a fixture since the mid-1980s when it was created in response to repeated General Accounting Office criticism of the lack of an automated system to evaluate joint training exercises. Administered by the Joint Staff (J-7), JULLS reports are solicited from individual participants in joint operations as well as from major headquarters and service components. Reports are reviewed by unified commands as well as the Joint Staff, usually to document remedial actions. Because it is a combination of service and joint reports linked by keywords, JULLS has a well-deserved reputation as a user-unfriendly system.

For that reason and also to look at the full scope of the operation, the Somalia archive was reduced to a hard-copy printout comprising some 200 separate reports totalling nearly 400 pages. The individual reports became more revealing as the relationships among them were tracked across all three phases of the Somalia operation: the early airlift and humanitarian assistance, the U.S.-led coalition of UNITAF, and the de facto combat of UNOSOM II that took place under U.N. control.

Although this unusual approach to the JULLS system of micro-analysis yielded some important macro-level insights, the Somalia archive also highlighted some fundamental problems in the way we collect and analyze our operational lessons:

- The JULLS system is built around individual reports that are primarily used to identify and solve specific problems. Because it is difficult to determine the linkage of these problems to larger issues solely through keyword searches, JULLS reports can be a "science of single events" unless they are related to other evidence (as actually occurred during this project).

- Individual JULLS reports range from the trivial to the profound; but because they lack specific context information or other corroborating data, it is often hard to

judge their validity. Worse, normal personnel turbulence and lengthy processing times often make it impossible to track down those who originally submitted them.

■ There is always tension between the candor needed for improvement and the perceived or actual potential for embarrassment caused by putting oneself on report. There is similar tension between the need

the solution is to link what we say to what we actually do

for thoughtful review of JULLS reports as they work their way through the system and the temptation to eliminate or water down those which show commands or services in an favorable light. Reports on the de facto combat phase of UNOSOM II, for instance, were delayed for months in the case of one command as such tensions were presumably thrashed out.

These problems suggest that the JULLS system is a throwback to an era in joint operations when fault finding was studiously avoided to preserve interservice comity. Because of institutional reluctance to trace operational effects back to first causes, the system acts as an endlessly repetitive *lessons unlearned* exercise that usually resolves only marginal issues. As one jaded veteran put it: "I could take any operation we're starting next week and write the first 30 JULLS today."

Doctrinal Changes and Constants

A system that concentrates on after-the-fact fixes that never seem to recur in just the same way is singularly ineffective in dealing with a constantly changing international environment. The volatility of this environment creates incentives for the Armed Forces to master the most persistent obstacles to the integration of joint capabilities. How else do we deal with chaos and adaptive adversaries than by eliminating those difficulties which we can and should control?

The solution is to link what we say to what we actually do. Specifically, it means a closer alignment of functions that often proceed independently: the way joint operations are planned and evaluated, and the way

joint doctrine is validated. Such linkage is essential to subjecting new ideas on joint warfare to operational testing and rigorous analysis. The process suggested here is a more systematic approach to field testing ideas on jointness through exercises, training, readiness, and combat itself (see figure 1).

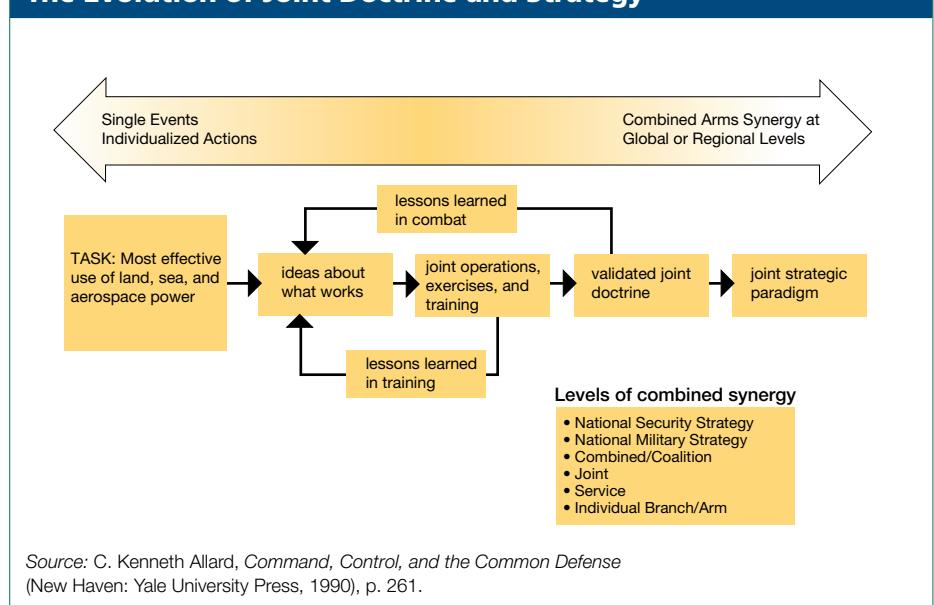
Refining ideas through the operation of organized feedback loops is what will yield a body of joint doctrine validated by systematic operational testing. Although it is uncertain if this process might lead to an overarching joint paradigm as a complement to the American way of war, developing an integrated body of doctrine validated by field experience is a basic goal in itself.²

Current practice could not be farther from this ideal. There are 103 titles in the hierarchy of joint pubs, a staggering number considering that compiling joint doctrine did not really begin until after Goldwater-Nichols. Eye-numbing page counts further compound the problem: a new publication on noncombatant evacuation procedures is more than 200 pages. While no human could possibly read such a vast array, few would ever want to, since the writing is notoriously verbose and stilted. Yet the most precarious aspect

about what now passes for joint doctrine is that it was compiled by diligently polling the usual sources—the services and other affected parties. That practice would not pose a dilemma if the results were simply taken as tentative ideas about what works and then subjected to field testing. But as matters stand, the only consistent tests are the least common denominators: brokered solutions and bureaucratic interests.

This military equivalent of political correctness contrasts sharply with the more forthright approach the Army adopted a decade ago, with compulsory after action reviews at every level of training and operations planning. While neither perfect nor painless, the process promoted candid self-improvement that eventually was imbedded in service culture. It also tied operations planning to lessons learned in a period of vigorous doctrinal experimentation—much of it aided by computer simulation and sophisticated technology. That precedent underlines what the services do best: provide laboratories to develop the basic elements of combat power. Joint institutions must now provide an essential counterpoint by searching for new ways to combine those elements—with next-generation simulations playing the role in larger combinations that they now exercise in training individual warriors. As one observer recently

The Evolution of Joint Doctrine and Strategy



noted, "It is hypothetical wars, not real ones, that will shape doctrine in the years to come."³

All the more reason, then, to use the analytical rigor of modelling and

muddling through is no longer an acceptable alternative

simulation to tackle head on the disturbing tendency in joint operations to keep making the same mistakes. Among other things, this means not putting the cart before the horse. Rather than being inflated with additional volumes of indigestible prose, the current collection of joint doctrine needs to be screened for those fundamental organizing principles which ought to guide the integrated employment of joint combat power, including criteria to decide when operations should be joint and when they can be handled by a single service. Those concepts should be tried and tested through joint exercises conceived with such specific purposes in mind. A JULLS process truly worthy of the name could play a vital role in supporting this process, much as Army after-action reviews contributed to the refinement of AirLand Battle doctrine. A new body of field-tested joint doctrine would also validate the artificial dividing lines in the current hierarchy of joint doctrine by distinguishing bedrock principles from the mass of tactics, techniques, and procedures that are part of the operational infrastructure but are far more transient. That distinction alone would be a worthwhile contribution to educating future joint warfighters, a well-understood baseline being fundamental to the virtuoso improvisations that will be expected of them in years to come.

Shaping the Future

The ultimate expression of such a revised approach to joint doctrine might not necessarily be contained in another series of publications even if the writing and methodology were improved. The next generation of expert computer systems can significantly aid joint planning, provided that we first clarify our assumptions about linking thoughts to actions. It does not take a

leap of faith to conceive of future cyber-systems serving as trusted associates to those hard-pressed humans who function as operations planners. The person in this future loop, however, would be able to draw on his own professional experience as well as artificial intelligence to reconcile unique mission requirements with joint doctrinal principles and even the most recent operational insights. In that way, current operations could be linked far more effectively to our best ideas about what works and what does not.

But future possibilities and persistent problems evoke a familiar argument: this is just the normal cost of doing business and is more than offset by a genius for muddling through, especially when the chips are down. But like many familiar arguments, this one has outlived its usefulness. There are four related reasons why muddling through is no longer an acceptable alternative:

- The international security environment will be marked by continuous discontinuities for the foreseeable future. It is a basic requirement that forces operating in this environment not only limit their vulnerabilities but also act more quickly and effectively than an adversary. In a chaotic environment, we must first eliminate self-induced disorder.

- One of the most important environmental discontinuities is technology. Whether change is seen as an ongoing military-technical revolution, a future revolution in military affairs, or a much larger revolution in the security arena, it will profoundly affect the integration of joint capabilities. Given the pace and scope of this revolution, failing to test assumptions about jointness is extremely dangerous. Basically, high tech means tighter teamwork. But often it takes a tragic mistake (such as the shoot down of the Blackhawks over northern Iraq in 1994) to highlight the inadequacies of old thinking and outmoded assumptions.

- Because this new security environment presents difficulties for policymakers, the military is being asked to do more with less. With declining force levels and budgets, there is less margin for error in what we do or how we do it. Persistent errors become vulnerabilities to be exploited by an

enemy. As crises from Somalia to Bosnia already indicate, adversaries can offset military inferiority with innovative tactics that take advantage of errors on our part.

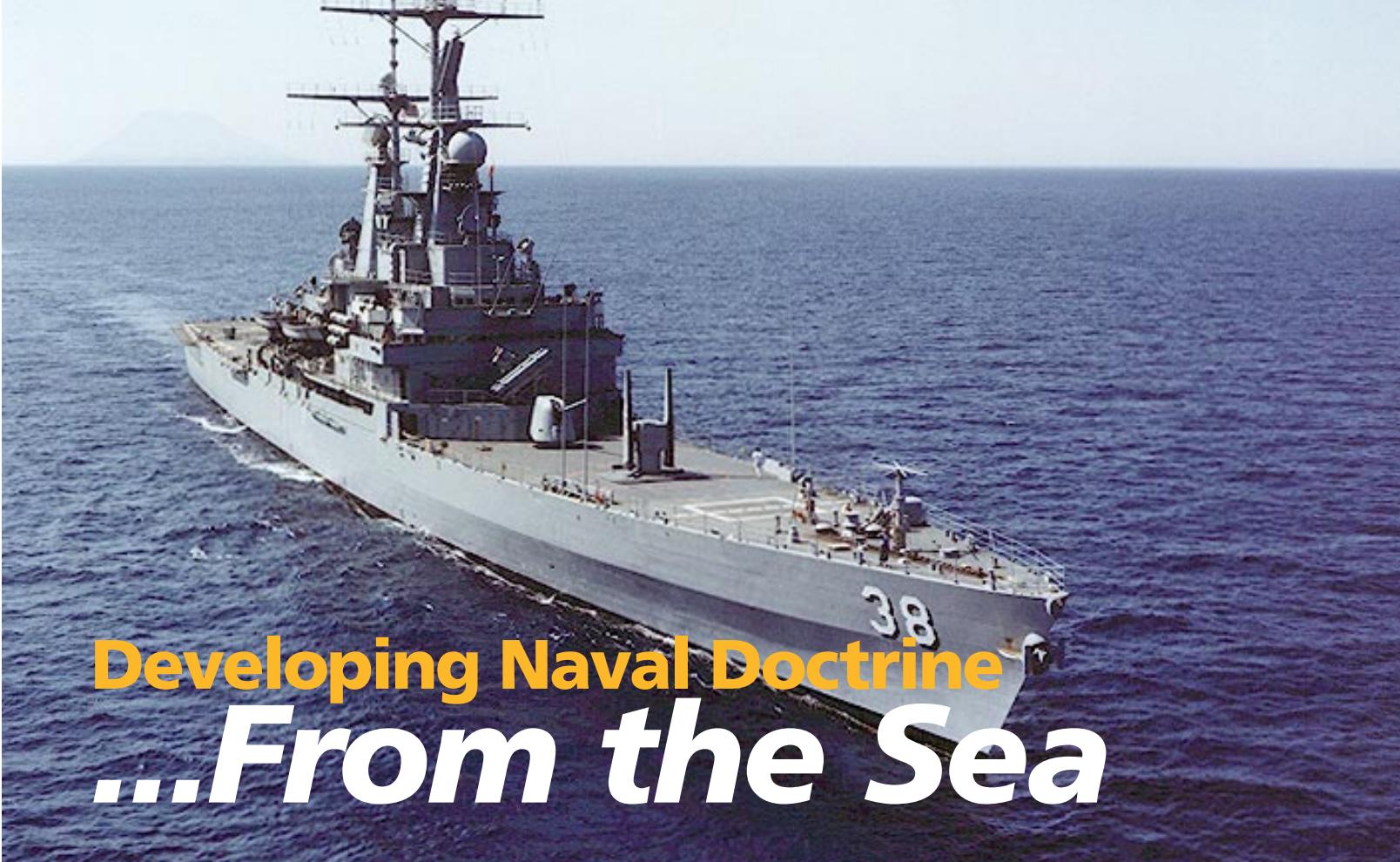
- Somalia reveals that many institutional mistakes are corrected (when the chips really are down) only through extraordinary efforts by junior officers, NCOs, and most of all by individual soldiers, sailors, marines, and airmen. Our senior leaders, however, have a special obligation to limit the need for such heroic efforts and sacrifices.

Senator Strom Thurmond recently defined stupidity as doing the same thing over and over while expecting different results. We should by now realize the basis of the historical problem in joint doctrine as well as the futility of expecting different results from the same muddled processes. Those with responsibility for the further development of this uniquely American joint culture might well consider what must be done to set these things right. **JFQ**

NOTES

¹ This article draws on the author's recently published book entitled *Somalia Operations: Lessons Learned* (Washington: National Defense University Press, 1995).

² C. Kenneth Allard, *Command, Control, and the Common Defense* (New Haven: Yale University Press, 1990), pp. 260-62.



USS Virginia.

U.S. Navy

By JAMES J. TRITTEN

Following their victories in the Spanish-American War, Admirals William T. Sampson and Winfield Scott Schley engaged in a lively public debate over their respective records at the Battle of Santiago in July 1898. The Spanish admiral, Pascual Cervera, outmaneuvered the North Atlantic Squadron and managed to enter the Cuban harbor at Santiago where he maintained a fleet-in-being. After several failed attempts, a combination of joint actions ashore and at sea lured the Spanish fleet out of the harbor. Cervera was defeated in the ensuing battle.

The argument over how the battle should have been fought lasted for years; a Presidential order was needed to stop the debate. The acrimonious enquiry into tactics and doctrine following the Spanish-American War deterred

frank and open discussion of doctrine in the Navy for years. One might conclude that the Sampson-Schley debate virtually banished the term *doctrine* from the naval lexicon, inhibiting a generation of officers from exploring the nature and content of doctrine.

Lieutenant Commander Dudley W. Knox wrote a prize-winning essay in 1915, published in the *U.S. Naval Institute Proceedings*, that attempted to revive doctrine as an issue. While Knox failed to bring doctrinal debate to the fore, doctrine was no longer a forbidden subject. It appeared in tactical publications whose readership was almost exclusively Navy officers. It also took root in the unwritten but extremely powerful form of shared experiences derived from service at sea, fleet exercises, and war college courses. Doctrinal debate resumed in wardrooms and classrooms rather than in professional journals.

By World War II there was a mature, formal, and centralized system for developing and evaluating doctrine in the Navy, one that guided rather than directed the fleet commander on how to fight. While conventional wisdom says that the Navy has never had a centralized military doctrine, the U.S. fleet in World War II operated under a series of hierarchical doctrinal publications. At the top was *War Instructions: United States Navy*, F.T.P. 143 and F.T.P. 143 (A), which was issued by Commander in Chief, United States Fleet, and published in 1934, then revised and republished in 1944. The first stressed joint operations and the wartime version led off with a chapter on the importance of combat leadership competencies.

Underneath that publication was *General Tactical Instructions*, F.T.P. 142, issued by the Chief of Naval Operations in 1934. Next in the hierarchy was Commander in Chief, U.S. Fleet, *Current Tactical Orders and Doctrine*, 1941, U.S.F. 10. The Pacific Fleet created its doctrine once the experience of the war had been internalized: Commander in Chief, U.S. Pacific

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Fleet, *Current Tactical Orders and Doctrine U.S. Pacific Fleet*, PAC-10, published in 1943. There were also type doctrines and tactical orders prepared for each class of ship. Fleet and multinational doctrine also existed in the Atlantic Fleet where *Atlantic Convoy Instructions* published by the Royal Navy was accepted as doctrine. Despite some claims, written Navy doctrine did not detract from operations at sea during

the Navy is contributing to multiservice, joint, and combined doctrine

the war, nor did operations suffer from a lack of written doctrine. Recently, Naval Warfare Publication (NWP) 1, *Strategic Concepts of the U.S. Navy*, continued the evolution of the Navy's doctrinal thinking.

The following look at the evolving Navy attitude toward doctrine provides a framework for understanding the service's current perception of doctrine, and examines the important differences between single-service Navy doctrine and multiservice naval doctrine. It also analyzes the lessons learned from historical research of doctrine in navies, concluding that the Navy is fully engaged in the doctrine-development process and is contributing to multiservice, joint, and combined doctrine, strategy, and operations.

Changing Perspectives

Naval doctrine has existed in various forms since World War II, some more obvious than others. Written doctrine addressed naval (that is, Navy and Marine Corps) concepts of both joint and combined doctrine as well as that which is service-specific. Doctrine for amphibious warfare also appeared in service-specific naval warfare publications, tactical notes, and memos. And the Navy recognized that the bulk of its doctrine existed in the unwritten shared experiences of its officers. But as one observer recently noted, it was time for the Navy to take stock of its concept of doctrine development and the status of doctrine in the naval services. Establishing a connection between the Goldwater-Nichols Act and the Gulf War, the Navy faced a potential gap in warfighting concepts.

Doctrine need not be written to be effective. Unwritten customary naval doctrine has long existed in the form of the commander's intent, as well as in the cumulative experience of admirals and commanders. There is a long history of informal beliefs of the officer corps as Navy doctrine; doctrine may even have been more powerful in that form than in the official written versions which coexisted. The symmetry between doctrine and international law is noteworthy. Informal doctrine is to law based on custom as formal

doctrine is to treaties. While both forms of the law are equally valid, treaties are far easier to change.

As they examined the nature of change and continuity in the early 1990s, the Armed Forces described their vision of the future. The Navy's white paper entitled . . . *From the Sea* directed the naval services away from open-ocean maritime strategy toward naval expeditionary forces for joint and combined operations in the littoral. It also announced the establishment of the Naval Doctrine Command (NDC) which opened in March 1993 under the supervision of both the Chief of Naval Operations and the Commandant of the Marine Corps. It was designated the focus for developing doctrine to sustain the strategic concepts outlined in . . . *From the Sea* and subsequent documents. Publication in 1994 of *Forward . . . From the Sea* reaffirmed the tenets of the original white paper and made modest enhancements in some areas.

NDC is charged with developing multiservice naval concepts, integrated multiservice naval doctrine, and Navy service-unique doctrine. Its missions include providing a coordinated Navy and Marine Corps position in joint and combined doctrine development and ensuring that naval and joint doctrine are addressed in training and education, and in operations, exercises, and wargames. Priority is given to doctrine that addresses the new geo-strategic environment and a changing threat and efforts that enhance integrating

naval forces in joint and combined operations. The center has recently published *Naval Warfare*, the capstone doctrine manual for the naval service.

As a capstone document, *Naval Warfare* forms the bridge between the naval component of military strategy and naval tactics, techniques, and procedures (TTP). *Naval Warfare* addresses the employment of naval forces as well as levels and principles of war. It forms the framework for subsequent development and refinement of naval doctrine. *Naval Warfare* is the first step toward common understanding of the precepts and procedures of naval warfighting.

While NDC is the first multiservice naval doctrine command, it is not the first command to write naval doctrine. The doctrine division of the Marine Corps Combat Development Center has been in operation for several years, and naval contribution to joint doctrine is well established. In earlier times, doctrine was prepared by major naval commands and by Washington headquarters.

An example of how the Navy is adapting existing naval doctrine can be seen in its response to maneuver warfare, a concept that was articulated clearly by the Marines in 1989. Maneuver warfare has been espoused by the Navy in *Naval Warfare*, and NDC will soon publish the concept of maneuver warfare at sea. This action parallels recent Air Force investigation of maneuver warfare and Army adoption of some of its tenets. It remains to be seen whether maneuver warfare eventually becomes joint doctrine if it is adopted by all four services.

A Formal Approach

Like other professions, the military of many nations have historically relied upon a system of knowledge and beliefs to define their job. But unlike medical practice, military doctrine varies substantially among nations in much the same manner that doctrine differs among the military arms and services of a nation. Sometimes doctrine has been written and centralized and sometimes it has been unwritten and decentralized, especially in navies. All forms of military doctrine, however, have at least two elements in

common: how the profession thinks about warfare and how it acts in combat. Each element is necessary to create

joint doctrine which governs the strategic and operational levels is written for CINCs

doctrine; neither is sufficient without the other.

Joint doctrine, which governs the strategic and operational levels of warfare, describes the ways service assets are employed to achieve strategic ends. Joint doctrine is primarily written for CINCs. The services train and equip military forces, but it is the unified CINCs who actually use forces in support of national policy.

The services influence the form and content of emerging joint doctrine in various ways, including comments from each service and the participation of service officers assigned to the Joint Staff and the staffs of CINCs. Service headquarters and service and multiservice doctrine centers and commands influence the process. Though each service plays an important role in drafting joint doctrine, they cannot veto the results. The Chairman is the final arbiter of joint doctrine.

Since the services may need to cooperate outside the approval authority of CJCS, there are provisions for multiservice doctrine to guide the employment of forces of two or more services in coordinated action. Multiservice doctrine is primarily for the strategic or operational levels of war. Much of the thinking behind multiservice doctrine predates Goldwater-Nichols.

Cooperation between the services on multiservice doctrine is exemplified by AirLand Battle doctrine. The U.S. Army Training and Doctrine Command (TRADOC) and Air Force Tactical Air Command started the multiservice Air-Land Forces Applications Agency in 1975, which has since become the Air, Land, Sea Application (ALSA) Center. While it may be simply a matter of time before these multiservice organizations are absorbed by a revamped Joint Warfighting Center, there is reason to believe in the longevity of multiservice doctrine. The Navy finds it far

more palatable to develop naval doctrine within the context of the familiar Navy-Marine team than in the new joint environment.

The other services, Joint Staff, and unified CINCs influence the process in a manner that can take control of naval doctrine away from the Navy.

There are various reasons for retaining multiservice doctrine centers. Sponsoring services can retain direct control over the operations of such agencies, generally outside of the formal joint process and without the participation of the Joint Staff or unified commands. Such activities also have the advantage of allowing service coordination, a procedure that can resemble making laws or sausages, at a level that generally does not prejudice either the process or the product.

NDC has given the Navy its first centralized command responsible for publishing doctrine for the fleet. Since it is a multiservice command—naval doctrine publications bear the signatures of the Chief of Naval Operations and the Commandant of the Marine Corps—some of its products contain multiservice doctrine. The Navy will use the command for Navy doctrine, but the Marine Corps will still utilize its doctrine division at the Marine Corps Combat Development Center.

Multiservice naval doctrine bridges policy, processes that produce strategy, and preparation of information related to TTP. Just as there are some joint TTP, there will be some multiservice naval TTP dealing with the multiservice naval environment. Individual Navy and Marine-specific TTP will be the domain of the respective services. Thus multiservice naval doctrine will primarily be concerned with the operational level of warfare, which influences both the strategic and tactical levels, as is generally the case in the other services.

The compatibility of service and joint doctrine will become an issue in the future. As the services revise doctrine to meet service needs and joint doctrinal guidance, they will be reminded that service doctrine is not supposed to be inconsistent with joint doctrine. For example, some services in

other countries have had difficulty deciding which service doctrine should shape operations when a second service is acting in support. Although a system of joint doctrine should preclude such conflict, it will take time to address and settle the issues that will inevitably appear as joint and service doctrine evolve.

It should be no surprise that doctrine has a vital multinational dimension. Multinational operations, in their varied forms, play an important part as the Armed Forces review and modify doctrine. In responding to crises under the auspices of international organizations, alliances, or ad hoc coalitions, some form of doctrine is needed to ensure common understanding of purpose and actions. The Cold War stimulated such an evolution in NATO, but not easily or quickly. No other international organization has a comparable common understanding of how military professionals think about warfare and how they plan to act in combat. Some form of national military doctrine, including U.S. doctrine, may have to be used as a surrogate in operations outside NATO.

Lessons of History

The single most important lesson to be learned concerning the development of doctrine by world navies is that navy and multiservice naval doctrine has existed under other names throughout history. In addition to written naval doctrine, which goes back at least to the 13th century with the publication of *Título XXIV, De la guerra que se face por la mar* by Rey de Castilla Don Alfonso X el Sabio in 1270 at the Spanish royal court, informal customary doctrine has existed as a shared culture of values and principles in the minds of admirals and commanders in most navies.

There are numerous lessons to be learned from a preliminary review of the history of navy doctrine. First, navies have studied and borrowed doctrine from one another for years—just as we routinely borrow technology. We learned about carriers from the Royal Navy which was to follow American doctrine when its carrier forces were integrated in the Pacific Fleet during

World War II. Second, important doctrinal lessons can be drawn from history, even from the age of sail. Even a cursory study of history reveals that the most vexing doctrinal issues have remarkable durability, regardless of the era or the technology of the fleets:

- What should be the principal form of attack?
- Should escorted ships or their escorts be the object of the attack?
- How much of the attacking force should be held in reserve? What is more important, protecting escorted ships—or an invasion force—or defeating an enemy's offense?
- How should navies fight in the littoral, where most naval warfare has occurred?
- What is the appropriate command and control as naval forces project power ashore?
- How can allies and ad hoc coalition partners be integrated to achieve a single purpose?
- How far should local commanders comply with doctrine issued by bureaucracies?
- How much should commanders rely on enemy intentions as opposed to capabilities?

Such issues have been debated for hundreds of years and illustrate the enduring qualities of questions about how to fight that cross national, geographic, and technology boundaries.

Third, formal navy doctrine suffered a setback with the introduction of new technologies and end of the Anglo-French wars in the age of sail. During those conflicts much naval warfare occurred without significant new technologies to tip the scales. Hence before steam, advances in warfare at sea came via other evolving forms, such as doctrine. Navies debated doctrine and some wrote extensively when technology was static; then as doctrine advanced so did combat potential.

The ironclad forced navies to deal with improvements to naval art and combat potential through technology. Once the wars between Britain and France were over, the assumed adversary changed to other nations or to no specific nation, and the need to refine doctrine was no longer urgent. Little effort was devoted to learning to fight smarter. Perhaps the relative independence of fleets at sea also contributed to the lack of a recent tradition of formal doctrinal development.

Fourth, it is axiomatic that pre-war doctrine cannot foresee all eventualities. No matter how well military doctrine is thought out before a war,

operators at sea and in the field will prevent doctrine from becoming doctrinaire

history demonstrates repeatedly that forces and technology will be used in ways that no one anticipates. The combat leader must not only know service doctrine but when to follow it and when to deviate. Only then will the commander know that deviation has occurred and what that means.

Finally, operators both at sea and in the field must be given the latitude to apply judgment to doctrine. Their input from the fleet and field will prevent doctrine from becoming doctrinaire. Any learning organization must be able to question long-established assumptions, principles, and practices to find and validate new ideas if the organization hopes to remain doctrinally sound.

A foreword to the 1943 edition of *Current Tactical Orders and Doctrine U.S. Pacific Fleet (PAC-10)* stated that the document was "not intended and shall not be construed as depriving any officer exercising tactical command of initiative in issuing special instructions to his command . . . the ultimate aim is to obtain essential uniformity without unacceptable sacrifice of flexibility." The authors continued, "It is impractical to provide explicit instructions for every possible combination of task force characteristics and tactical situations . . . attacks of opportunity are necessarily limited by the peculiarities of each situation, by the judgment of subordinate commanders, and by the training they have given their personnel. . . . No single rule can be formulated to fit all contingencies." These are good words to live by.

An Army study of the relationship of combat leaders to battlefield tactical success in Europe during World War II identified one feature common to all divisions ranked among the top ten—the superior quality of the leaders in

each division. Their leaders had a great capacity for independent action and a determined avoidance of fixed patterns. That perception was later updated by a former TRADOC commander who emphasized that Army doctrine is not prescriptive. At the same time, he went no further than to state that current Army doctrine is "as nearly right as it can be." History supports the view that doctrine should guide rather than direct.

Shifting from open-ocean operations to joint littoral warfare will be as traumatic as moving from battleships to carriers. The challenges in . . . *From the Sea* and the importance of jointness to the Armed Forces represent a significant change. The Navy is documenting current naval doctrine, and in the process adjusting from open-ocean operations to the joint littoral environment. The next step will be to help the fleet internalize the doctrine. Once the Navy has accepted the legitimacy and value of formal written doctrine, it will be time to start developing doctrine for the future as well as the world of programming, that is, acquisition. Those responsible for developing and explaining naval doctrine have avoided the debates over roles, missions, and functions.

Navy doctrine is the art of the admiral; it is not and can never be an exact science. Navy and naval doctrine reflect a common cultural perspective on war and military operations other than war. Doctrine in the Navy and the Marine Corps must be dynamic even as it attempts to identify and preserve that which is enduring in naval experience, traditions, and values.

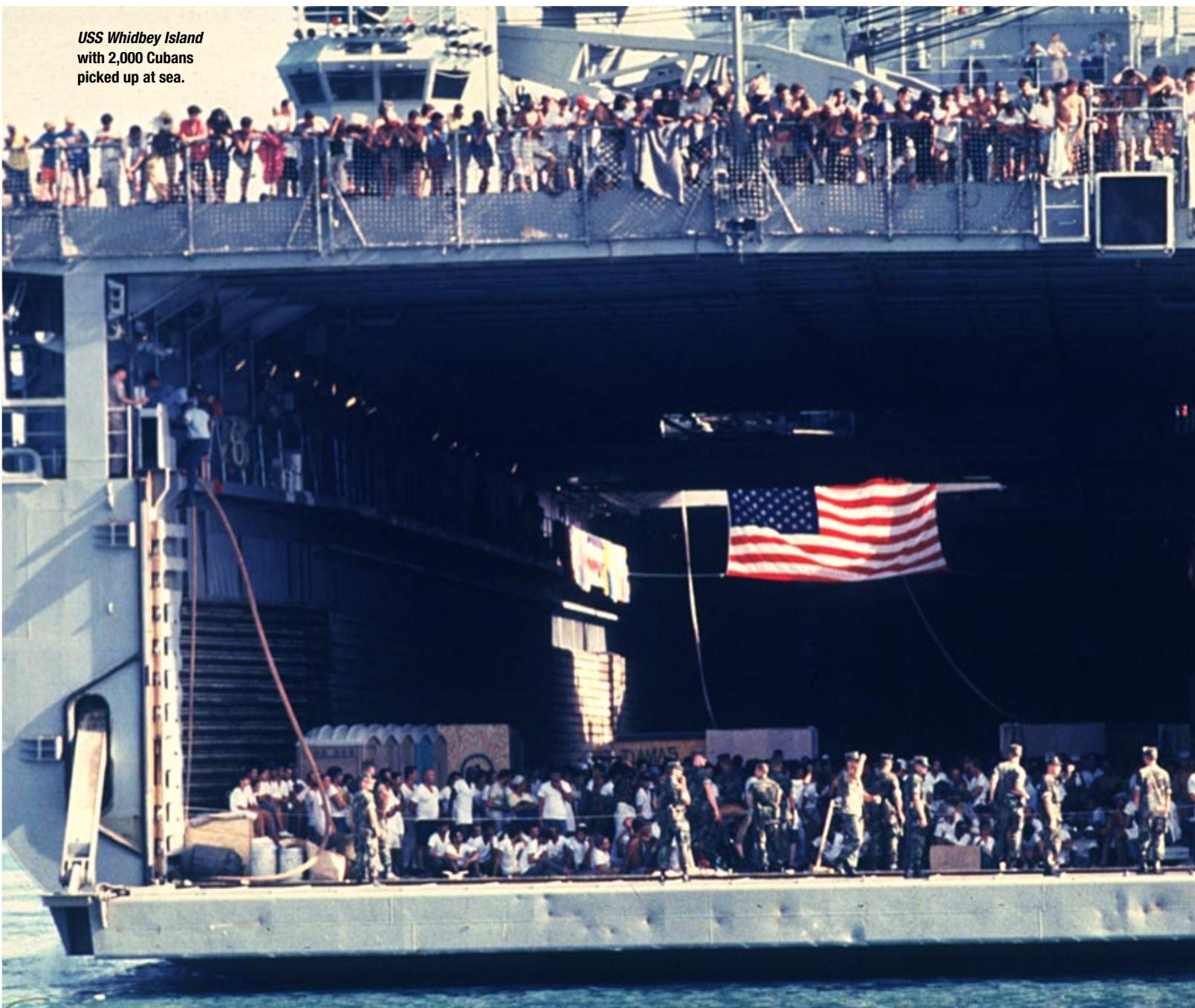
Formal naval doctrine will shape the judgment of naval leaders at all levels of conflict in the same way that customary traditional doctrine has done for hundreds of years, but it will adapt more readily to change.

JFQ

This article is based on a report by the same title published by the Naval Doctrine Command.

A Guantanamo Diary— Operation Sea

*USS Whidbey Island
with 2,000 Cubans
picked up at sea.*



Signal

By W. D A R R E N P I T T S

By late summer 1994 the expansion of refugee operations just to the south of Florida had reached a crisis. The U.S. naval base at Guantanamo Bay in Cuba was already host to more than 14,000 Haitian refugees. With existing camps at McCall airfield filling to capacity, U.S. personnel immediately began construction of others in the Radio Range complex. As Coast Guard and Navy vessels began interdicting more than 3,000 Cuban rafters per day, it was distressing to realize that they also would have to be quartered. Gitmo was ill-prepared to provide for the security, health, and welfare of an additional 34,000 Cubans at what would amount to \$1 million per day.

The subsequent efforts of JTF-160 transformed Guantanamo while forcing the departure of military dependents to the United States. This survey of Operation Sea Signal focuses on security and operations associated with displaced persons with emphasis on the critical role of civil affairs (CA) and psychological operations (PSYOP).

The Mission

The rapid buildup of military infrastructure to support Sea Signal re-

vealed potential flaws in deploying CA personnel. Sufficient capabilities, which should have been a planning factor, were deployed reactively rather than proactively. The delayed arrival of the 96th Civil Affairs Battalion as well as both Army Reservists from the 416th Civil Affairs Battalion and Marine Reservists from the 4th Civil Affairs Group did not jeopardize the mission, but their presence could have facilitated communication with refugees. The initial table of organization for JTF-160, based on CA assets on the ground, was inadequate for Sea Signal. The primary mission was humanitarian assistance. CA support to Sea Signal included both civilian containment and control and civic assistance.

Civilian containment involved physical development of refugee camps as well as matters of internal communication and security. Its success depended heavily on the degree to which security forces and CA personnel augment J-3/S-3 staff and advance party/site survey teams. The planning should have identified civil affairs as a principal player in executing the JTF-160 mission.

Civic assistance provided for medical, dental, and veterinary care; basic sanitation; logistics and maintenance; and other tasks. Ideally, such projects are short term, high impact, low cost, and technologically simple, with a reasonable certainty of completion. This was a tough litmus test for Sea Signal. Although some missions are simple in concept, they are logically difficult.

Multi-Service Operations

One aspect of integrating civil affairs assets into Sea Signal was multi-service participation. With the exception of Desert Storm and several other joint operations, not many efforts have been conducted by both Army and Marine civil affairs. Army civil affairs is a special operations forces (SOF) asset and Marine civil affairs is a proven Marine air-ground task force (MAGTF) resource. As such, when a Marine head-

support to Sea Signal included civilian containment and civic assistance



DOD (Alexander C. Hicks, Jr.)

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quarters is designated the lead JTF component, it is practical to first use its organic capability before seeking external support. This practice reflects the application of sound doctrine. With regard to civil affairs, the Army's ability to conduct large-scale operations such as those in Haiti could be complimented by tactically-oriented Marine CA assets which focus on operational support in the tactical AOR.

Since jointness represents the future of military operations, the Marine Corps should make its CA capabilities better known to CINCs and the Joint Staff. The Marines should consider set-

ting up both formal and informal relationships with their Army counterparts, active and Reserve. In future operations the Marine Corps should assign CA liaison officers to CINCs as well as to Army civil affairs commands. This would lead to a better appreciation of the unique CA capabilities of both services and facilitate training among active and Reserve civil affairs units.

Haitians await
volunteer repatriation.



DOD

Refugee Processing

On arrival, Cuban refugees were typically put in camps to await processing at the migrant processing center. Because of a lack of vehicles, some refugees took up to two weeks to reach the center. As Coast Guard and Navy vessels continued to pick up rafters at record rates, off-loading and transporting migrants impacted on vehicular support between the camps. JTF-160 initiated a database known as the deployable mass population identification and tracking system (DMPITS), consisting of a five-station processing center. Fully staffed, it could process 1,500 migrants per day, although the average was between 800 and 1,200.



DOD (Helene Stikkel)

Despite DMPITS, family members often were housed in separate camps, some for months. This resulted in frustrating, time-consuming activities to unify families. Because of the intensive labor and transport needed for family reunification, increased participation by other organizations should be considered. Governmental organizations (GOs) and non-governmental organizations (NGOs) are actual force multipliers. Among those organizations at Guantanamo, the Community Relations Service (CRS) of the Department of Justice and the World Relief Organization (WRO) were key contributors. CRS was the lead agency for implementation of the Family Reunification



DOD (Alexander C. Hicks, Jr.)

Cubans on board *USCGC Tampa* being searched.

JTF-160 setting up air transportable hospital.



Military police conducting quick response training.



DOD (Alexander C. Hicks, Jr.)

Program which sought to reunite family members, many of whom had been separated at sea either prior to interdiction or during DMPITS processing. Because of Sea Signal's push to send as many Cubans to Panama as possible, the program impacted on all facets of the operation. WRO, on the other hand, arranged the collection and distribution of donations for the refugee population. Both GOs and NGOs should coordinate their activities through civil affairs whenever possible.

In late August and early September, living conditions became horrendous according to one camp commander. As average daily temperatures soared over 100 degrees, trash and human waste awaited the arriving refugees as well as security forces. This environment was suddenly home to men, women, children, and infants.

According to some participants, the civil affairs contingent was initially a token (comprised of two officers and one enlisted at staff level). With more than 3,200 migrants arriving each day, security and health problems overwhelmed the facilities. There were shortages of running water, medical facilities, and sanitation (porta-potties) in the camps.

Airlift and sealift for this humanitarian mission had to be shared with JTF-180 which was gearing up for a

JTG-Bulkeley sought to provide a safe and habitable environment

showdown in Haiti. Living conditions deteriorated and tension mounted as camp populations swelled. Risks to military personnel grew exponentially and the political signals from Washington fueled the volatile fire of despair within the tent city.

The camps were being constructed and filled to capacity in a matter of days, with command then turned over to incoming military police units. Was Sea Signal really a military police mission? Refugees, furious over living conditions and the abrupt change in immigration policy, complained, demonstrated, and eventually rioted.



Military police patrolling refugee camp.

legal status, family reunification, problems of the sick and elderly, unaccompanied minors, and treatment by the security forces. Easing tensions and the segregation of single males and troublemakers enabled camp commanders to delegate greater responsibility for internal activities to these democratically elected leaders.

CA personnel had interpreters whose background, maturity, and proficiency could vary on a daily basis. Some were school-trained while others spoke fluent Spanish but could not read the language. There were also difficulties arising from variations in dialect. But the mission could not have been accomplished without linguists. More than once, Spanish-speaking personnel identified and defused volatile situations before they turned violent.

Crisis, however, was not always the order of the day. Cuban teachers taught English to children. Men worked in makeshift craft shops. Recreational programs entertained and occupied the general population. By mid-October, security concerns had given way to intramural baseball, and some Cubans even opted to go on daily runs with members of the security force.

Infrastructure

JTG-Bulkeley sought to provide a safe and habitable environment for the refugees and keep the migrant population informed on their legal status and on options such as relocation to Panama (Operation Safehaven) and repatriation to Cuba. In addition, JTG-Bulkeley sought to target quality of life issues to improve migrant living conditions.

Civil affairs focused on developing and sustaining camp infrastructure. Military police and civil affairs commanders met with Cuban camp leaders daily, often going tent to tent. A critical aspect of their job was simply listening, providing information, making assessments, and advising the commander. As soon as health and comfort problems were resolved, other issues which had been festering under the surface quickly arose.

With CA assistance the camps elected government councils (camp leaders) to represent their concerns. Typically, they raised issues on their



Erecting tents to house JTF-160 personnel.

Cuban refugees being served on food line.

DOD

Shortly after the August 1994 demonstrations, the migrant camps were designated as being for single males, families, or unaccompanied minors, although single females and married couples still were housed with single men in many cases. The maximum population of each camp was set at 2,500. In October 1994, additional sub-camps were created to segregate Cubans who wanted to be repatriated or relocated to Panama. Moreover, MAG 291 and Camp X-Ray were established to administratively segregate those who endangered the safety and welfare of others. Those migrants who committed infractions were moved to MAG-291 for 7–30 days. Felons and those who posed serious and documented threats went to Camp X-Ray

indefinitely. From a security perspective Camp X-Ray was impressive, although it was not a prison as some have suggested. Infractions committed by detainees included theft, assault and battery, prostitution, and black market activities. Their segregation was intended to avoid a breakdown or disruption of law, order, and discipline in the camps. Some refugees made improvised weapons out of cot ends, tent poles, soda cans, et al. which were routinely confiscated in security sweeps.

PSYOP Support

It is important to note that psychological operations were neither authorized nor conducted by JTF-160. But PSYOP support in the form of a

military information support team (MIST) was invaluable although initially separate from the CA effort. MIST provided excellent products and programs for security forces as well as civil affairs. The stated mission of the team was to assist with population control, safety, and sanitation to increase force protection.

MIST executed its mission by publishing *¿Que Pasa?*, a weekly newspaper for the Cuban camps, and operating "Radio Esperanza," which broadcasted from 0900 to 1700 daily. The paper initially was ignored by the Cubans who said it looked official and did not adequately address their interests, namely, obtaining visas and gaining entry to the United States. Eventually, MIST and civil affairs linked up, and Cuban-written contributions were soon introduced into *¿Que Pasa?* Thereafter readership and overall receptiveness quickly improved. MIST personnel came from the 1st PSYOP Battalion and the Dissemination Battalion of the 4th PSYOP Group and operated with civil affairs until September 1994. MIST provided extremely valuable service to both the JTF staff and refugee population.

PSYOP assets were deployed to Cuba before January 1992 to support Operation GTMO. Planning for the operation assumed no more than 2,500 migrants, and discussions at U.S. Atlantic Command focused on whether PSYOP support was even needed for this type of mission. In the final analysis it is important that PSYOP be put under the operational control of civil affairs since it allows for coordinated activities and more effective support in such operations.

Security and Infrastructure

The security mission was clear: to maintain control of the refugee population and to protect American personnel assigned to the base. Two Army military police battalions, reinforced by two Air Force security police

companies, provided internal security. A Marine infantry regiment was responsible for external security. The rules of engagement (ROE) for security forces stressed the humanitarian nature of the operation and only came into play during demonstrations, outbursts of frustration, and intentional acts of violent misconduct.

Military police company commanders typically had responsibility for two refugee camps. Internal as well as external guards were posted and patrolled the camps continuously. They carried nightsticks and hand-held radios. Each watchtower had a two-man team. Marines, on the other hand, provided perimeter security and carried M-16s. A quick reaction force was kept on standby to quell riots or extract problem refugees from volatile situations. A few refugees jumped the wire and attempted to swim home. This was an ever-present danger and American personnel could only assist swimmers who requested help.

The ongoing nature of Sea Signal represents a unique opportunity for security forces and civil affairs to master civilian containment and control procedures. The handling of large numbers of displaced people raises several important questions for planners and

supported CINCs. First, are JFCs deploying and integrating CA assets in contingency operations at the appropriate time? Also, will valid requirements be ignored or minimized because the capabilities reside primarily in the Reserve components? More than 90 percent of civil affairs personnel are Reservists, and there is only one active duty civil affairs battalion.

Given the lessons of Operation GTMO in 1992 and those learned from Sea Signal, further debate and perhaps some top-level guidance regarding civil affairs deployment and employment is needed before the next JTF reinvents the wheel. The execution of two simultaneous civil affairs operations (in

despite the aggressive efforts by JTF-160, civil affairs was an afterthought

Haiti and Cuba) at the low end of the spectrum challenged those who participated. What opportunities exist, if any, for facilitating joint CA training for these operations?

With regard to Guantanamo, one can only speculate on the rapid planning that accompanied the tasking for Sea Signal. In anticipation of future operations, should force planners overestimate the CA dimension of the mission, given the lead time to marshal operational support?

Despite the aggressive efforts by the staff of JTF-160, civil affairs was an afterthought. Critical tasks must be performed from the outset of an operation. The world watches CNN. When a crisis is real, everyone knows it. The question for joint planners and warfighters is whether the OPLANS and their respective force lists reflect initial use of Reserve civil affairs units? Or perhaps a better question is should they include them?

JTF-160 enveloped a gray area of low intensity conflict contingencies—part security, but mostly civil affairs. Most junior officers would argue that both security forces and CA personnel should have arrived on the same aircraft. If Sea Signal is an indication of the new politico-military landscape, force planning for security and civic assistance missions requires serious re-thinking.

On May 2, 1995, almost nine months after Sea Signal began, the administration announced a reversal in policy. All but a handful of the Cubans would be allowed to enter the United States. According to *The New York Times*, “[Cubans] were being admitted for humanitarian reasons and because Washington feared rioting this summer at the naval base. But recognizing that the decision to admit them could set off a new flood of boat people, the administration said that it would in the future return all Cuban refugees who flee [from Cuba] to that communist country.”

What should we be ready for next? With regard to civil affairs, Sea Signal reflected both an earnest application of past lessons and blatant oversight of others.

JFQ

General Lemuel Cornick Shepherd, Jr.

(1896–1990)

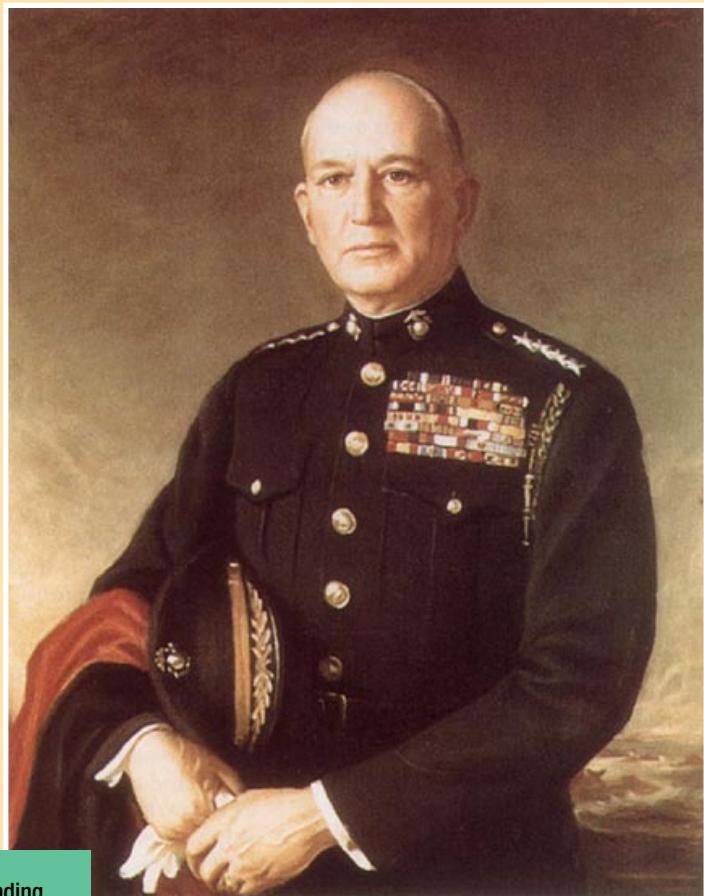
Commandant, U.S. Marine Corps

VITA

Born in Norfolk, Virginia; graduated from Virginia Military Institute (1917); commissioned in the Marines and ordered to France (1917); aide to commandant (1920–22); served aboard *USS Nevada* and *USS Idaho* (1922–25); Marine barracks, Norfolk (1925–27); 4th Marines, China (1927–29); field officer's course, Quantico (1930); Haiti (1930–34); Marine Corps institute staff (1934–36); Naval War College (1937); 5th Marines (1937); Marine Corps schools staff (1939–42); 9th Marines (1942); 1st Marine Division, Guadalcanal (1943); Cape Gloucester (1943); 1st Provisional Marine Brigade, Guam (1944); 6th Marine Division, Okinawa (1945); assistant commandant and chief of staff (1946–48); commandant of schools (1948–50); Fleet Marine Force, Pacific; Inchon landing (1950); 20th commandant (1952–55); chairman, Inter-American Defense Board (1956); returned to active duty (1956–57); died at La Jolla, California.

On June 28, 1952, the President signed into law a bill amending the National Security Act so as to grant co-equal status on the Joint Chiefs of Staff to the Commandant of the Marine Corps on matters which he decided were of direct concern to the Marine Corps. The Commandant's selection of matters of Marine Corps concern was binding unless overridden by the Secretary of Defense on the recommendation of the Chairman, Joint Chiefs of Staff. By "co-equal status," the Congress meant that the Commandant would enjoy all the rights of JCS membership on a matter of direct concern to the Marine Corps under consideration by the Joint Chiefs of Staff.

—*Chronology of JCS Organization, 1945–1984*



Portrait by Bjorn Egeli.

U.S. Marine Corps Museum

Lessons Learned

JTF-SWA

Led by the Evaluation and Analysis Division (J-7), Joint Staff, a team of subject matter experts visited Joint Task Force Southwest Asia (JTF-SWA) in May 1995. This operation reflects CENTCOM preparation and support of forces executing assigned missions. The visit focused on air operations with emphasis on planning, coordination, and conduct of theater-wide operations, command relations, targeting selection, air tasking order development and distribution, and joint doctrine integration.

The team observed operations and conducted interviews at the headquarters of U.S. Central Command; JTF-SWA in Riyadh; U.S. Naval Forces Component Central Command in Bahrain; 4404th Composite Wing (Provisional) in Dhahran; Al Jaber Air Base in Kuwait; and British Forces and French Air Forces in Saudi Arabia.

JTF-SWA is carrying out an operationally and politically demanding mission of enforcing the no-fly zone. The JFC and his staff have provided leadership and guidance that has resulted in a strong mission focus in an operation with a high operational tempo and personnel turnover (the JTF tour of duty is 90 days). In addition, some specialty organizations (such as combat search and rescue and Patriot units) are feeling the strain of high world-wide personnel tempo. For continuity the JFC billet will transition to a one-year assignment. The overall demands on resources are being overcome by quality people who optimize limited assets.

Joint/Combined Air Operations. Joint and combined air operations reflect strong published guidance and daily oversight of operations to ensure a consistent focus on the mission. JTF-SWA does not have a separate JFACC since the operation's size and nature allow the JFC to accomplish the functions including targeting, which is fairly static. JTF-SWA develops ATOs using doctrinal divisions of combat plans to produce the order, combat operations to effect ATO execution, and intelligence to support the plans and operations divisions. Effective liaison is key to the process by ensuring that U.S. Navy, French, and British representation is included in ATO development.

JTF-SWA efficiently develops and distributes the ATO. Using the latest version (5.11) of the contingency theater automated planning system (CTAPS), the JTF is able to distribute the ATO three to four hours before the deadline. Transmission time is excellent, with a goal of 90 seconds. Planners augment the order with locally produced PowerPoint flow diagrams. (As in Deny Flight, planners and operators prefer a flow diagram, which is not available in CTAPS.) The diagrams are E-mailed via CTAPS to units. The Navy CTAPS connectivity is good, enhanced by a JTF liaison team that meets each arriving aircraft carrier to brief JTF procedures. Additionally, a carrier liaison officer works in the ATO shop during the carrier battle group presence. The French and British are well integrated into ATO development, but their forces rely on the collocated American units to provide paper copies of daily ATOs.

ATOs run for 24 hours, but flight operations only occur during a portion of each day. The order is effective at a specified point prior to the first takeoff and, depending on takeoff time, may begin at different hours of the day. This affords a single ATO for an entire day instead of dividing the day between two ATOs at 0600. All missions affecting JTF-SWA are on the ATO. Although JTF-SWA CTAPS is the best that has been observed, many non-CENTAF personnel arrive with little or no CTAPS training. A local program is effectively training new operators, but the 90-day tour significantly impacts on developing an experienced planning staff.

Command and Control. While theater command arrangements do not coincide exactly with joint doctrine, the relationship works. JTF-SWA is essentially a JTF staff in that it has no service or functional components. A complicating factor is that the JFC only has tactical control of forces made available by CENTCOM component commanders. This does not provide operational control of the forces that the JFC employs and does not facilitate unity of command at JTF level. Although this situation is not optimal, the JTF is making it work and accomplishing the mission.

The ROE program is excellent. JTF-SWA ensures that these rules are briefed to all aircrew members before they fly. Both the weekly JTF-wide scenario exercises incorporated in aircrew training and a JTF developed training matrix are superb. In addition, carrier aircrews are briefed and participate in scenario exercises as they arrive in the AOR.

Joint Publications. The availability of joint publications in theater is increasing but remains a problem worldwide. J-7 is working on this shortcoming and distributing joint pubs to all JTFs. While CD-ROMs are the preferred medium, many units do not have the equipment to utilize them in the field and paper copies are thus required. Access to joint pubs and a widespread familiarity with joint doctrine will continue to improve interoperability.

This visit to JTF-SWA highlighted a real-world operation, and the resulting lessons learned form a basis for enhancing future operations. These assessments provide planners with a first hand view of capabilities and potential problems. **JFQ**

Exercises

FUERZAS UNIDAS '95

A combined joint task force was formed for Fuerzas Unidas-Peacekeeping Operations '95, a command post and field training exercise that was conducted from August 21 to September 1 in Buenos Aires. Hosted by the Argentinean army, the exercise was held under the sponsorship of U.S. Southern Command with more than 250 participants, including both military and civilian personnel from Argentina, Brazil, Paraguay, Uruguay, and the United States.

Of the players, over 80 percent of the Argentines, Brazilians, Uruguayans, and Americans had previously served in at least one peace operation. The exercise drew 50 representatives from 17 countries and the United Nations as well as observers from the National Security Council Staff, Office of the Secretary of Defense, Joint Warfighting Center, National Defense University, et al.

The Argentinean army war college provided the venue for a series of planning conferences and a computer simulation, which was driven by a master events scenario list and which used both the joint conflict model and the civil affairs model. Participants also toured the newly established Argentinean Joint Peacekeeping Training Center (CAECOPAZ) located at Campo de Mayo outside Buenos Aires.

Overall, the exercise offered opportunities to enhance military-to-military relations, foster regional security cooperation, and demonstrate roles and missions of armed forces in peace operations. A follow-on exercise is planned for August 1996 in Montevideo, Uruguay. **JFQ**

Education

NEW AFSC COURSES

The Joint Command, Control, and Electronic Warfare School (JCEWS), an element of the Armed Forces Staff College, has redesigned its resident courses into two new offerings to meet the needs of 420 students annually. The school has merged the Joint Electronic Warfare Staff Officer Course (JEWSOC) and the Joint Command and Control Warfare Staff Officer Course (JC²WSOC) to emphasize the emerging importance of C²W while retaining the important EW portions of C²W. The new two-week course is known as the Joint C²W Staff and Operations Course (JC²WSOC), and the first class is scheduled for January 1996. The course is focused on the doctrine, concepts, and procedures that joint, combined, and service C²W officers need to perform their duties. The curriculum will consist of three parts: a foundations block on doctrine and basic concepts; a block on C²W elements and service C²W capabilities; and an applications block on information warfare, ship and aircraft tours, and a practical exercise. Sponsored by the Director for Operations (J-3), Joint Staff, the course will be taught seven times each year on the TS/SCI/TK level for military personnel in grades E-7 through O-6 as well as DOD civilians in equivalent grades. An unclassified version of the course will also be offered once each year for allied students.

The school also has redesignated its other resident course. The five-week Joint Command, Control, and Communications Staff and Operations Course (JC³SOC) is now the Joint Command, Control, Communications, Computers, and Intelligence Staff and Operations Course (JC⁴ISOC). The 14-block course includes a 7-lesson information warfare block and a field trip to Washington. Sponsored by the Director for Command, Control, Communication, and Computer Systems (J-6), Joint Staff, the course is taught six times each year on the TS/SCI/TK level for military personnel in grades W-1 through O-6 as well as DOD civilians in equivalent grades. **JFQ**

JOINT LOGISTICS

In September 1990 the joint logistics commanders (JLC) tasked an ad hoc group to study the need for mid-level executive training. This group, which had representation from each service and was

chaired by the Army, sent out 4,000 questionnaires to survey interest in a joint logistics course and identify the duty positions of potential students. The survey revealed a training void that led to the development of a three-week course to prepare mid-level managers from the active and Reserve components (majors/lieutenant commanders and lieutenant colonels/commanders) as well as civilians (in grades GS-12 through GS-14) for assignments that involve joint logistics planning, interservice and multinational logistics support, and joint logistics in a theater of operations.

The Joint Course on Logistics is designed to: (1) integrate DOD programs for effective and economic logistical support to national strategy and a basis for resource decisions; (2) compare the approaches of the Defense Logistics Agency (DLA) and the services in support of DOD, joint, and theater objectives, and how DLA and the services project logistics capability to support the CINCs; (3) integrate multinational logistics as a support multiplier; (4) develop plans for service component logistics resources in support of theater contingency operations; (5) assess the effectiveness of joint and service strategies as well as CONUS sustainment capabilities on logistical support decisions; and (6) apply DLA and service logistic support capabilities in developing contingency scenarios.

The curriculum manager for the course, which will be administered at Fort Lee, Virginia, is Abraham F. Chadwick of the Army Logistics Management College who may be contacted at either (804) 765-4710 or DSN 539-4710 for further details on course offerings and service quotas. **JFQ**

History

UNIFIED COMMAND

The Joint History Office has published *The History of the Unified Command Plan, 1946-1993*. Beginning with a discussion of efforts to establish a system of unified commands following World War II, the monograph traces the evolution of high-level, global command arrangements of the Armed Forces from just after World War II to the reorganization of U.S. Atlantic Command. An overview traces the debates over command arrangements for the Pacific and Far East, strategic nuclear forces, and general purpose forces based in the continental

United States. This discussion reveals how the unified command plan has become less protective of service prerogatives and more an instrument of jointness. Available from the Director for Joint History, OCJCS, Room 1B707, The Pentagon, Washington, D.C. 20318-9999. **JFQ**

Periodical Literature

J.V. Arbuckle, "Command and Control of Canadian Forces in Combined Operations," *Canadian Defence Quarterly*, vol. 25, no. 1 (September 1995), pp. 17-21.

Eric L. Chase, "Summing Up Roles and Missions: A Marine Corps Perspective," *Marine Corps Gazette*, vol. 79, no. 7 (July 1995), pp. 60-66.

Edward J. Filiberti, "National Strategic Guidance: Do We Need a Standard Format?" *Parameters*, vol. 25, no. 3 (Autumn 1995), pp. 42-54.

Timothy J. Haraden, "Joint From Day One," *U.S. Naval Institute Proceedings*, vol. 121, no. 7 (July 1995), pp. 37-39.

George F. Kraus, Jr., "Information Warfare in 2015," *U.S. Naval Institute Proceedings*, vol. 121, no. 8 (August 1995), pp. 42-45.

John Mackinlay and Jørn Olsen, "Squaring the Circle: Europe's Armies Train for Peacekeeping and Warfighting," *International Defense Review*, vol. 28 (October 1995), pp. 74-78.

William A. Owens, "Report on the JROC and the Revolution in Military Affairs," *Marine Corps Gazette*, vol. 79, no. 8 (August 1995), pp. 46-53.

John M. Quigley, "Creating Joint Warfighters," *U.S. Naval Institute Proceedings*, vol. 121, no. 9 (September 1995), pp. 62-65.

John D. Rosenberger, "The Key to Joint Readiness," *U.S. Naval Institute Proceedings*, vol. 121, no. 9 (September 1995), pp. 58-61.

Gregory C. Sieminski, "The Art of Naming Operations," *Parameters*, vol. 25, no. 3 (Autumn 1995), pp. 81-98. **JFQ**

Also noted...

"Multinational Force Command Authorities Handbook: Proceedings of the Central Region-Chiefs of Army Staff (CR-CAST) Working Group on Command Authorities Required for a Multinational Force Commander" (Carlisle Barracks, Pa.: U.S. Army War College, September 1, 1995), 104 pp. **JFQ**

THE ART OF WAR— PAST, PRESENT, FUTURE

A Review Essay by

DAVID J. ANDRE

Maneuver Warfare: An Anthology

edited by Richard D. Hooker, Jr.

Navato, California: Presidio Press, 1993.

409 pp. \$35.00

[ISBN 0-89141-499-1]

On Artillery

by Bruce I. Gudmundsson

Westport, Connecticut: Praeger, 1993.

176 pp. \$55.00

[ISBN 0-275-94047-0]

Fighting by Minutes: Time and the Art of War

by Robert R. Leonhard

Westport, Connecticut: Praeger, 1994.

186 pp. \$55.00

[ISBN 0-275-94736-X]

If the past, current, and prospective future nature of the art of war is likened to a tapestry, its texture will be largely the result of how theoreticians and practitioners alike have sought to deal with key issues: maneuver, fires, and the element of time. If one believes that large-scale theater warfare is passé and that military operations other than war will be dominant in the future, then the three books under review may only be of historical or general interest. However, if one thinks it is important for the world's remaining superpower, in a period of constrained defense budgets and force drawdowns, to ensure the quality and effectiveness of its forces and prepare for the possible rise of dangerous regional, niche, or peer military competitors, then the works offer something of practical, substantive value.

Richard Hooker has gathered a range of ideas by former senior military practitioners, well schooled and thoughtful younger field grade officers, and seasoned, non-uniformed theoreticians. Contributors include Robert Leonhard and Bruce

Gudmundsson, whose books are also reviewed here. *Maneuver Warfare: An Anthology* groups 21 pieces in three parts that Hooker recommends should be read as "a collection of essays, perhaps only tangentially linked, each making its own independent contribution to an evolving body of thought." It is good advice.

The first part of the volume sets the stage with a theoretical discussion of maneuver warfare as a concept and a system of ideas. Some mature professionals may view this approach as largely a compendium of timeworn, even obscure ideas. But the many defining arguments presented by Daniel Bolger in "Maneuver Warfare Reconsidered" and Robert Leonhard in "Maneuver Warfare and the United States," along with Richard Hooker in "Ten Myths about Maneuver Warfare" and James McDonough in "The Operational Art: Quo Vadis?" are worth the price of the book, despite one's previous exposure to the subject.

The verdict in this part of the book on maneuver warfare theory is perhaps best captured in a quip by Tallulah Bankhead which is cited at the beginning of Bolger's piece, "There is less here than meets the eye." Or, as Bolger himself concludes after disparaging the social science approach to the study of war, "Maneuver warfare is bunk. No competent soldier, let alone the entire U.S. military establishment, should embrace it."

The other side of the coin is well represented by the venerable William Lind. Regardless of whether one agrees with his interpretation of military history, especially as it involves his analysis of cause and effect (viz., maneuverists usually win and attritionists usually lose), the fact remains that it was largely Lind's early ruminations on maneuver warfare—many succinctly captured in the lead essay—that originally got so many people thinking seriously about it.

Part two addresses institutional implications of maneuver warfare. It is widely appreciated that innovation is commonly resisted in large organizations. In the military, to the extent that this results in advancing what Stephen Peter Rosen terms a "new theory of victory" in *Winning the Next War: Innovation and the Modern Military*, such resistance can be especially dogged, even virulent. So if you believe in maneuver warfare, the real challenge lies in figuring out how to sell it to skeptics, not to say to supporters of the familiar, comfortable status quo—and making it stick. This part of the book thus reaffirms the timeless wisdom that, when trying to bring



about change in a large organization, implementing strategies often are as important as ideas themselves.

Stylistically and substantively this is the weakest part of the volume, which is unfortunate in light of the rich theoretical and case-study history of organizational behavior and the process of innovation. It does, however, offer a useful examination of Franz Uhle-Wettler—German army veteran of World War II and former tanker, general staff officer, and lieutenant general—on the much misunderstood and even more abused concept of *auftragstaktik*, and Michael Duncan Wyly's experience on how to teach maneuver warfare. Aside from rehearsing the campaigns that should be part of any lecturer's stock information on maneuver warfare and recommending further readings, Wyly's piece is valuable because he comes out four-square against teaching maneuver concepts solely through the use of historical examples. In his view, the best way to get a student's mind to grasp decisionmaking is to employ a mixture of historical and hypothetical cases.

The final part of *Maneuver Warfare* presents eight historical studies that portray successful applications of maneuver concepts or contrast them with other styles of warfare, mainly attrition. Hooker sets the stage in an introductory essay which notes that the maneuver and attrition schools of thought are not so much polar cases as reflections of cultural and organizational predispositions

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that dominate doctrine and operations of armies, a distinction often lost on hard core maneuverists.

Gudmundsson leads off this part of the anthology with a well-researched discourse on the German tradition in maneuver warfare, followed by pieces on the French during World War I, the "Rommel model," Wavell and the first Libyan offensive of 1940–41, the *Wehrmacht* approaches to command and control as well as deception, the German conquest of Yugoslavia, and early German operations against Scandinavia. Apropos of the other two books under review, Robert Doughty's essay on the French in World War I nicely prepares the reader for what Gudmundsson explicates in greater detail in *Artillery*, including the tension in the French army between artillery (fires) and infantry (what passed for maneuver in those sanguine days) and how the reality of the battlefield led the French to modify their operational doctrine and cede the major role to artillery. John Antal in "The *Wehrmacht* Approach to Maneuver Warfare Command and Control" aptly complements the contribution by Uhle-Wettler in explaining the overall command and control process, including the German approach, to the estimate of the situation and operations order, as well as the "brief-back" technique, all of which are easily recognizable today in both Army and joint doctrine.

The publication by the Army in 1976 of FM 100-5, *Operations*, effectively launched the military on a two-decade running duel on the relative merits of maneuver versus attrition warfare. It has resulted in a lot of either/or, is/is not. James McDonough, in a particularly thoughtful piece in Hooker's anthology, separates himself from both sides of this argument by noting that a concept like maneuver warfare does not stand alone. As the Germans and Russians demonstrated time and again during World War II, commanders can shift from one to another and, indeed, conduct both simultaneously. In many cases it is simply a matter of scale. On the tactical and operational levels, maneuver by one part of a force might require more linear, positional operations by other elements. The Gulf War seemed to bear this out. In McDonough's view, real doctrine must be a complete fighting doctrine—a balance of maneuver, fires, protection, leadership, sustainment, command and control, and the like, all attuned to the situation at hand. It cannot be just maneuver.

In spite of its unevenness, *Maneuver Warfare* has much to offer the reader, especially the pre-staff college Army or Marine Corps officer. But it is in the context of the ongoing U.S. force drawdown, and such issues as how best to organize to fight future wars, that the book might most usefully be studied by experienced professionals. The Germans, for example, able innovators and executors of maneuver warfare, lost World War II in part because they were outnumbered. But the Israelis, who also always lacked the resources of their adversaries, nonetheless deliberately turned to maneuver-based doctrine and leadership in the hope of solving unforgiving strategic problems. This underlying and apparently competing logic may be a way to better inform the debate over how shrinking forces might best execute their growing menu of traditional and nontraditional missions in the new world (dis)order.

Maneuver is rarely possible without fire support, including indirect fire artillery. This arm exerted a profound influence on World War I. During the interwar period, the British, French, and Americans responded to artillery-dominated positional, attrition warfare with more artillery (that is, hardware). The Germans, meanwhile, sought an operational answer (that is, brainware) by opting for relational maneuver, combined arms *panzer* divisions supported by tactical airpower, and by adapting operational and organizational concepts for employing artillery accordingly.

Gudmundsson explains this and more in *On Artillery*, a well researched and documented book. He begins by acknowledging the many works currently available or soon to be published on American, British, and Russian artillery, along with surveys of artillery developments from the Middle Ages to the present. He then chronologically examines field artillery in conventional war by contrasting French and German approaches during the period bounded by the Franco-Prussian War and World War II, with reference to later experience by Israel and the United States. In so doing, he admits that scant attention is paid to artillery in amphibious, airborne, guerrilla, urban, mountain, or nuclear warfare and also that the employment of coastal, siege, or antiaircraft artillery is largely ignored.

Gudmundsson points out that the difference between the artillery doctrines of France and Germany lay in the way their respective officers viewed troops. This led to contrasting approaches to command and control. Accordingly, he

revisits the perennial question of a preferred relationship between artillery and ground maneuver forces: whether artillery should be a supporting arm that helps ground troops gain fire superiority over enemy maneuver units (the traditional French view); whether a more cooperative or "artistic" arrangement is preferable (the German theory); or whether fires might generally be capable of playing the leading role in future war, including substituting for ground combat troops (a view widely heard today but, one suspects, difficult to realize in practice). To close the circle, each perspective has different implications for command and control of artillery units. But as the book makes clear, how one decides these issues is often less an analytic matter than a function of how one systematically views the whole, as between contrasting perspectives on war (Jomini, Clausewitz, and Douhet) and positional versus mobile warfare. *On Artillery* is full of such dialectical conundrums.

Other enduring issues raised by Gudmundsson are the willingness to innovate; maneuver versus attrition warfare; the balance between a long-range artillery duel and close-in forward fight; infantry versus other artillery as the primary target; locating enemy batteries; the frequent impotence of counter-battery fire; locating artillery forward versus the rear; fighting as batteries versus massed (and, if massed, concentrating or dividing fires of massed batteries); field guns versus howitzers; the number of tubes per battery; division versus corps as the optimal echelon of command; how best to task organize artillery, including centralization (the operations research solution which takes artillery commanders out of the loop and separates fire planning from maneuver in infantry units) versus decentralization; timing fires against certain kinds of targets; the notion of "maneuver of fire"; and the problem of fratricide.

On Artillery highlights the fact that, just as there was extensive experimentation and much debate among German planners before and during World War II over the approach for employing artillery with *panzer* and other units, there is now a lack of consensus on the implications of the lessons from World Wars I and II for the use of artillery, and fires more generally, in future wars. Gudmundsson cautions that a constrained fiscal environment may exert a pernicious influence on national security decisionmaking: witness the French reluctance, in spite of strong evidence to the contrary,

to change artillery because it had just been purchased.

Throughout history, the author notes, technology has made it possible to separate indirect field artillery from the close combat of infantry (the "great divorce"), thus dividing the combined arms battle into two struggles. Almost as soon as this happens, however, a new class of weapon is found in a role abandoned by the artillery. Developments in fire support promise to exacerbate the great divorce. But whether, as Gudmundsson seems to believe, the "revolutionary" fiber optic guided missile (FOG-M), with its "unique guidance system," is the gap filler that can end the great divorce remains to be seen. Mercifully, he treats highly technical issues in a nontechnical language and greatly enhances the value of his technical insights by relating them to the higher levels of war. Numerous footnotes and a bibliography that includes important French and German sources add still more to this study of artillery.

On Artillery is mainly of value to those interested in the modern history of indirect field artillery. Regrettably, the chapter titles and the index do not reveal the riches to be found between its covers. A broad assortment of timeless issues, already summarized, is addressed, but careful reading is required to isolate, identify, and distill them into a larger synthesis. The discussion of the future of artillery is limited to a final two-page chapter and should have been ignored altogether. At the same time, one of the book's strengths is an issue-based historical perspective on which the professional military can draw in thinking about the future, including innovation. For example, much thought on the implications of the revolution in military affairs (RMA) for fire support tends to revolve around where (geography and echelon) and how (timing and C²) to employ fires, and the need to rapidly neutralize an enemy's increasingly long-range, accurate, and lethal fire-delivery means. The desirability of developing and exploiting technological and operational asymmetries in the employment of fires, particularly on the operational level of war, tends to fall early victim to the belief that virtually all modern armies in the future will be able to see and shoot about as far and as effectively as everyone else. This view, of course, both ignores and—for all but a single-minded technologist—highlights the importance of doctrinal concepts for organizing and using fire support systems, a singularly important idea to which Gudmundsson frequently returns.

On Artillery makes an excellent contribution to the history of the military art, to one of the defining components of modern warfare, and to the ongoing assessment of future possibilities for organizing and operating artillery and other means for delivering fires. Military historians and staff college-level officers will find it of particular value.

William Lind reminds us in *Maneuver Warfare* that great captains have instinctively grasped the importance of time and speed in warfare. But he attributes the anchoring of maneuver theory in time competitiveness to the work of John Boyd, who held that conflict can be understood as time-competitive cycles of observing, orienting, deciding, and acting, and the side that can go through this cycle (the "OODA" loop) faster than the other develops a decisive edge. In another new title, *Fighting by Minutes: Time and the Art of War*, Robert Leonhard carries this thinking still further. As the author of an earlier volume on maneuver warfare, he is particularly well grounded for this. Beginning with the judgment that time is increasingly becoming the critical dimension in warfare, his thesis, simply stated, is that the most effective way to perceive, interpret, and plan operations is in terms of time rather than space. True to his conviction, he considers this work to be not just a professional infantryman's theoretical discussion of the changing nature of war, but as offering a major paradigm shift—from spatial to temporal. He characterizes his product as nothing less than a theory of temporal warfare, and arrives at it by examining how time interacts with weaponry, units, logistics, doctrine, morale, decisionmaking, and the spatial dimensions of war.

Apparently sharing Lind's perspective on the great captains, Leonhard is not willing to go as far as some contemporary futurists in declaring that time is a new dimension in warfare—the last, latest, or fourth dimension. Here he merely avers what most well schooled and experienced military professionals already know: that time is "the first and primary dimension that commanders and leaders have had to struggle with from the dawn of history. Length, width, and height do not exist if they have no reality in time."

Leonhard identifies four temporal characteristics of war—duration, frequency, sequence, and opportunity—and devotes a chapter to each of them. Proceeding from the fact that time can be observed, measured, and then manipulated, he concludes that a commander in

war should strive to control these characteristics. Of particular interest to those trying to better understand and advance thinking on RMA, he observes that the most revolutionary developments throughout history have been those that challenge or change military time calculations. From there, it is conceptually but a short step to information warfare, a subject receiving increasing attention within the Office of the Secretary of Defense and among the services.

Correctly or not, maneuver warfare is often viewed as residing mainly on the operational level of war. But in Leonhard's view time plays a critical role on all levels. For example, he sees the contest for time as the most important strategic problem facing the United States. Given ample time, America—the only remaining superpower—can meet any threat. But having shifted from a deterrence-oriented, forward-deployed military establishment to a rapid response strategy involving forces based primarily at home, time is more than just critical: it is often the enemy.

In theory, the United States can act militarily in days, hours, minutes, even seconds (there is talk today of "simultaneous" or "real-time" theater-wide operations.) In terms of tangible events, however, Leonhard warns us that "time is nature's way of making sure that everything doesn't happen at once." Friction aside, the complexities of war operate to ensure that everything cannot happen at once. "Friction does not just make actions in war more difficult, it also makes them take longer." (Are these the words of two insufferable empiricists, Clausewitz and Guderian, speaking to us from beyond the grave?) Leonhard would have us understand that it might be more accurate to describe the implementation of American warfighting strategy temporally in terms of weeks, or months—not just now but for years to come. This is often suggested by wargames and confirmed by contingencies. Forward presence is our hedge; but though necessary it is seldom sufficient.

Fighting by Minutes takes up the temporal characteristics of warfare: duration, frequency, sequence, and opportunity. *Duration* has a beginning and end, but Leonhard might have said more about "onset." Recent wargames and other analyses suggest that real leverage may be gained by applying pre-hostility hostilities, for example, in sophisticated approaches to information warfare. The author asserts that the relationship between technological disparity and duration is spurious. Large imbalances in strength

and technical advancement do not perforce mean that a war will be shorter. Similarly, he views as specious the argument that length of a war is a function of the relationship between attack and defense (if the former is qualitatively superior to tactical defense because of weapons technology, a war will be shorter, and vice versa). It may apply to battles, but not wars—a distinction that often gets blurred. The major determinant of war duration, he says, is an attacker's objectives. (One suspects that a defender's objectives and cultural predispositions might also be relevant.) Other determinants include relative incompetence (the commander who makes fewest mistakes wins) and number of participants (more means longer). Also, short wars tend to produce fewer changes. Winners claim that their doctrine works and maintain the status quo, while losers consider that theirs did not and make changes.

Frequency in war involves how fast things happen: tempo. "Frequency lies at the heart of how we perceive warfare. . . . Of all the temporal characteristics in warfare, frequency is the one that lies at the foundation of doctrine, tactics, and strategy. When revolutionary changes occur in warfare, most of the time it is because there has been a change in frequency at some level—a change in how fast things happen." In general, and as borne out by history and logic, the greater the frequency in war, the shorter the war. Leonhard thinks that change in frequency on the tactical level—especially major change—is the greatest cause of revolution in military art and science. He reasons that doctrine can be accommodated to frequencies which are near the norm. But if changed significantly in either direction (*blitzkrieg* versus trench warfare thinking), doctrine begins to falter to the extent that, at the extremes, war may not even be perceived. (Recall the earlier comment on "pre-hostility hostilities.") At either extreme old doctrines usually succumb.

Those who believe the next major war will be resolved in one powerful blow can skip the sometimes vague chapter on *sequence*. But those who perceive that warfare typically is resolved in multiple, discrete—if increasingly high-frequency—events, or those who remain uncertain, should take heed. Seeing virtue in necessity, Leonhard believes there is power in sequence. Each event in war has a value that depends upon events that precede and follow it. Outcomes favor commanders who contrive to control not just the order of their or

an enemy's actions but, more importantly, the order of the two combined.

In many ways the chapter on *opportunity*, the fourth and last temporal dimension of war, is the best. To Leonhard, opportunity is not simply a decision point but a time-sensitive point, "and that changes all the rules." A good and timely decision, while critically necessary, is not sufficient. There must be effective action, which requires an executing unit to have the requisite capabilities to act. Here the author delves into a major issue that often surfaces among those who ponder future-oriented operational and organizational concepts. Logically, in pursuing fleeting opportunities, one headquarters should be responsible. "Unfortunately, real experience in war often indicates that the one who decides and the one who acts usually are at two different levels: the headquarters decides and instructs a subordinate headquarters to act." So while eliminating echelons may be a good idea in theory, it almost certainly is not in practice—that is, unless the remaining echelons are provided with the requisite combined arms. And it is virtually impossible to determine in advance any one organizational allocation of resources and authority that will cover even the major possibilities.

Current notions of commanders on virtually all levels participating interactively in the same net and operating largely autonomously on the basis of a commander's intent or by negation may eventually solve this dilemma. But while these ideas undeniably have a certain theoretical appeal, they have yet to be demonstrated, much less convincingly, outside of the relatively narrow realm of a few large naval platforms engaging a relatively small number of enemy platforms—the classic example of "few-on-few." And this has never been done in modern warfare. At the least, these futuristic concepts tend to ignore the kinds of complexities that quickly arise in cases of "many-on-many," as well as the difference between being able to communicate with someone and being able to control them—especially when the span of control becomes very large.

Leonhard begins an extended treatment of mission tactics with the following observation: "The U.S. Army has finally adopted mission tactics—just in time for it to become irrelevant to modern warfare." He then continues, "the theory of mission tactics does not play out in practice, because *higher headquarters retains control of the resources*." It is all downhill from there. His take on the relative advantages of directive/decentralized

control versus centralized/detailed control, and two competing theories of war (the Gumbo and Nodal theories), may justify the hefty price of the book. Depending on the flow of information, either of the basic types of command and control may be effective, but "there is no intrinsic, universal merit in mission tactics alone." Indeed, he argues that detailed control has gained strength as a viable command technique in recent years owing to the essential shift in information flow as a result of the growth in reliable sensor and communications technology. As for Gumbo versus Nodes, the unceasing search for greater range may carry little-understood (by nonoperators) penalties and missed opportunities.

The author concludes that there are tough choices ahead, such as deciding the level of command that will be decisive in a conflict, and how to provide it with sufficiently robust organic combined arms capability and real authority. Further, there is the danger of giving a commander long-range weapons that do not mix well with other assets, that overburden intelligence capabilities, and that even threaten the most critical principle of war, unity of command. Lastly, fighting doctrine must be balanced to allow for an effective mix of directive and control. This is indeed a daunting agenda for analytic action, and we should press on with it.

Two chapters on surprise are more abstract. The author's sense of the "real issue" involves whether to get to the objective area first or with the most—to preempt or concentrate. He says that it really is situational but that the Army trains only for the latter. Still, a synthesis may be possible, as he explains using the concept of a "preemption-concentration cycle."

Leonhard concludes with a chapter on *coup d'oeil*, or a commander's inner vision, and how time is the independent variable and space must be made to conform. The commander's art thus involves structuring a campaign designed to force an enemy into contradictory dispositions at each point in time. This begins with viewing the campaign not in terms of time *required* but rather time *available*. Seemingly intending to motivate readers to initiate heated arguments with those of the opposite persuasion, *Fighting by Minutes* ends with the observation that, while opportunities will prompt commanders to delegate, the demands of unity of effort will prompt them to centralize. He resolves the dilemma in his own mind by concluding that commanders should organize in such a way as to empower the higher echelons. (Let the debate begin.)

Ambitious in scope, and thus somewhat uneven in its presentation, *Fighting by Minutes* is an important book: logical and systematic in its development, sophisticated, analytic, often subtle, frequently irreverent, and consistently mind expanding. Serious students of all levels of war past, present, or prospective future—and especially future—will learn much from it. Although it may be a bit daunting for all but the best read and analytically minded younger professionals, it should be studied at staff colleges and higher levels and by anyone pondering the likely nature of future war, including RMA. Many of Leonhard's conclusions and hypotheses would make good raw material for future-oriented wargames and simulations, for as he says, "With an insight into the nature of fourth-dimensional fighting, the road is open to new doctrines, new tactics, and new strategies."

Grasping the concepts of maneuver, fires, and time remains critical to understanding the art of war—past, present, and future. All three books reviewed above contribute to an appreciation of these vantage points. The past is history and the present is largely ephemeral; the future, however, including the possible nature of war, is yet to be. How it unfolds can be of profound significance, not just for the military art but for the well-being of nations, indeed of entire civilizations. Perhaps most importantly, the future is something on which military professionals can start to work now, to influence, shape, define, and even bring about.

With this in mind, Gudmundsson posits that there are essentially two approaches to conceptualizing war. One, practiced by J.F.C. Fuller, involves arriving at opinions and designs by a process of deduction from first principles. The other, as practiced by Guderian, is empirical. It begins from the premise that war has been, is, and always will be a practical business whose particulars are sufficiently complex to defy brilliant theories and devalue the strongly held beliefs of those who lack operational experience or a fundamental appreciation of it as practiced by others.

It is curious that many people today who are trying to put their stamp on the future tend to favor Hart's (and Douhet's) essentially theoretical deductive approach, and generally shrug off if not disdain the experience-honed views of some of history's most innovative military thinkers and lionized field commanders. It will be interesting to see how this plays out in the future.

JFQ

MORE THAN DEEDS OF DERRING-DO

A Book Review by

JOHN M. COLLINS

Spec Ops, Case Studies in Special Operations Warfare: Theory and Practice

by William H. McRaven

Novato, California: Presidio, 1995

402 pp. \$27.95

[ISBN 0-89141-544-0]

The best ideas are expressed briefly. Law libraries, for example, are loaded with volumes that interpret the Constitution, but the document itself, including all 26 amendments, takes up only a few pages. The SOP of the erstwhile Strategic Research Group, activated at the National War College in 1971 "to develop innovative studies . . . for consideration by decisionmakers at the highest levels of the U.S. Government and Armed Forces," confined its reports to fifty or fewer double-spaced pages.

William McRaven, current commander of SEAL Team Three, is well within

victory." The balance of the work consists of diverse case studies—six from World War II—that support his conclusions: the German attack on Eben Emael, Belgium (1940); the Italian manned torpedo strike at Alexandria, Egypt (1941); the British raid against Saint-Nazaire, France (1942); Otto Skorzeny's rescue of Benito Mussolini from Gran Sasso, Italy (1943); the British midget sub attack on the *Tirpitz* (1943); the Ranger rescue mission at Cabanatuan, a Japanese PW camp in the Philippines (1945); the unsuccessful American operation at Son Tay prison camp in North Vietnam (1970); and the Israeli counterterrorist operation at Entebbe, Uganda (1976).

The cases selected span the conflict spectrum from peacetime engagement to global war. All emphasize direct action combat missions against extremely tough targets, but the author seems confident that his theory applies to every form of special operations. Moreover, he contends that conventional forces rather than Rangers, SEALs, air commandos, or other special operations units may be the principal participants (Jimmy Doolittle, who led a flight of 16 B-25 bombers from the aircraft carrier *USS Hornet* to attack Tokyo in 1942, most certainly substantiated this view).



the limitations imposed on the Strategic Research Group when in the first 25 pages of *Spec Ops* he offers a theory to help decisionmakers "determine, prior to [a special] operation, the best way to achieve relative superiority, then . . . tailor special operations planning and preparation to improve our chances of

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Spec Ops expounds six principles of special operations derived from eight case studies: simplicity, security, repetition, surprise, speed, and purpose. They "dominated every successful mission," McRaven finds, and if "one of [them] was overlooked, disregarded, or bypassed, there was invariably a failure of some magnitude." Five principles correspond closely with objective, surprise, simplicity, and security, longstanding principles of war. Speed is one facet of maneuver. Only repetition is distinctively different.

Large conventional forces, however, cannot apply these principles to gain relative superiority, the author states, because it is difficult for them "to develop a simple plan, keep their movements concealed, conduct detailed full-dress rehearsals (down to the individual soldier's level), gain tactical surprise and speed on target, and motivate all the soldiers in the unit to a single goal. At some point the span of command and control becomes too great. . . . Large forces . . . are more susceptible to the frictions of war."

McRaven further finds that "relative superiority is a concept crucial to the theory of special operations." That precondition of success "is achieved at the pivotal moment in an engagement" that may be before or during combat, as the cases confirm. "Once relative superiority is achieved, it must be sustained in order to guarantee victories," and if lost is difficult or impossible to regain. "An inherent weakness in special forces is their lack of firepower relative to a large conventional force . . . they lose the initiative, and the stronger form of warfare generally prevails."

Most books about special ops simply describe daring exploits. This one is far more useful because the theory which it presents invites us to *think*, to adopt what applies, or to either elaborate or replace it if we know better ways to sustain capabilities that small, specialized forces can employ to defeat larger, well-armed opponents. In sum, *Spec Ops* will benefit strategists or tacticians who hope to beat apparently insurmountable odds by conducting special ops. It should be on the desk of every official who must decide when and where to commit special operations forces.

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FROM STRATEGISTS TO STRATEGY

A Book Review by

AUDREY KURTH CRONIN

The Making of Strategy: Rulers, States, and War

edited by Williamson Murray, Macgregor Knox, and Alvin Bernstein
Cambridge: Cambridge University Press, 1994.
680 pp. \$34.95
[ISBN 0-521-45389-5]

Strategy-making is an ancient yet elusive art. Inextricable from history, it has employed historical examples in exploring war-making since at least the time of Thucydides. More recently, the transition from the age of the professional soldier to that of mass armies and unlimited warfare has forced leaders of industrialized states to focus even more attention, time, and resources on the imperative to learn from the triumphs and debacles of the past. The book reviewed here follows in that tradition. It is an imposing collection of essays on strategy beginning with the Peloponnesian War in the fifth century B.C. and ending with American strategy during the Cold War.

The Making of Strategy is intended to describe procedures by which "political and military leaders evolve and articulate strategies in response to external challenges" and expand on the extant literature, especially the 1941 classic, *Makers of Modern Strategy*, edited by Edward Mead Earle, as well as a more recently updated version of that work edited by Peter Paret. Arguing that the earlier volumes focused on the influence of individual thinkers, the editors of this new collection purport to stress the process by which strategy is made. In an age of industrialized warfare, mass armies, complex bureaucracies, and democratic decisionmaking, this mandate seems more realistic. No one person really "makes" strategy in the modern age or arguably even decisively influences it, except during war. But understanding the consistent variables that have affected its formation throughout history might lend insight into the contemporary process wherein major states plan for or avoid conflict. That is the goal of this volume.

Audrey Kurth Cronin teaches at the University of Maryland and is the author of *Great Power Politics and the Struggle over Austria, 1945-1955*.

The predominant emphasis is on hegemonic war, fought between great powers and over vital interests. The essays are masterful accounts, showing impressive scholarly achievement and depth. The earliest is Donald Kagan's stimulating chapter on Athenian strategy in the Peloponnesian War. It is a good start, for an analysis of Pericles' failed strategy is fascinating, inviting thought on the danger of not matching means to ends, and the pitfall of assuming rationality (or at least predictable thought) in an enemy. Alvin Bernstein's piece on Rome (264-201 B.C.) also draws readers into another category—that of the alien milieu of a warrior culture, where violence is raised to the level of virtue. (Such thinking may not be that foreign today—especially in the inner city.) Bernstein's admonition that we must avoid believing that others view strategy and the use of force in the same terms that we do is always good advice.

Other excellent chapters include Arthur Waldron's on Chinese national security strategy in the 14th to 17th centuries. The conflict between nomadic "barbarians" and the "morally superior" Ming dynasty invites reflection on the influence of culture on strategic thinking. Mobile warfare as conducted by nomadic steppe people made much Chinese military theory obsolete. Eliot Cohen's examination of the United States between the world wars debunks the traditional argument that the Nation withdrew at that time into military paralysis, arguing instead that it developed institutions, weapons, and a mobilization base that were essential in wartime. "The experience and memories of those years help account for the otherwise inexplicable willingness of the American people to tolerate . . . vast peacetime military establishments; the premium on readiness and avoidance of surprise attack; the willingness to conceive of national security in global rather than local terms; and the American military's persistent preference for excessively neat patterns of civilian-military relations." These are thought-provoking pieces with much to interest today's strategist.

There are numerous other fine efforts: Geoffrey Parker on Habsburg Spain, John Lynn on France under Louis XIV, Peter Maslowski on America before the Civil War, Brian Sullivan on Italy in World War I, and Wilhelm Deist on Germany before and during World War II. Each is a classic and will become a standard reference for decades to come. But the issue for the reviewer is whether this collection transcends the high quality of the individual essays to achieve harmony and cohesion on a higher level. Is the whole greater than the sum of its parts? Here one is less sure.

Some of the finest military historians are represented in *The Making of Strategy*; there is not a poor essay in the book. Murray et al. are to be commended for a pervasive standard of excellence. But editing such an anthology also involves explaining why one period is chosen and another omitted and how balance and strategic vision (using the phrase advisedly) are injected into an entire collection. Are we presented with a volume that reflects the expertise of the contributors rather than a purposeful approach to the study of strategy?

Eight of the nineteen essays deal with strategy before and during World War I or II. This is understandable: these are periods about which the most is known, on which scholars can most effectively plumb the depths of archives. It is also logical to focus on war, since strategy is theory, and its strengths or weaknesses are determined in warfare. But are systemic wars the best source of insight for today and the future? The editors of *The Making of Strategy* state that they are not trying to be encyclopedic; comprehensiveness on such a theme is unrealistic. But some discussion of why certain areas are heavily explored while others are not would be enlightening.

Save for the interwar years and World War II, for example, virtually the entire focus is on Europe. What of Japan? The coverage of the post-1945 years is also

extremely scant, with only one article covering U.S. strategy from 1945 to 1991. And there is nothing on post-1945 Soviet strategy. Why is the prime focus of strategic minds in this century not explored? Michael Handel writes on Israel, but that is hardly far afield from European/American strategic thinking. Perhaps an essay on the Arab or Gulf states would have provided another dimension. There is nothing on China, Korea, India, or any other contemporary Asian power. Is the next enemy likely to come from Europe?

One conclusion from these case studies seems to be that having a rigid intellectual frame of reference is dangerous in strategy. The Ming Chinese, for example, approached the Mongols from a narrow cultural perspective and thus largely failed to develop an effective national security policy. Both the British and French considered war too horrible to contemplate in the interwar years and were almost obliterated by a highly radical German ideology with revolutionary goals. In the Peloponnesian War the Athenians assumed "rational calculation" by the Spartans, and their strategy was defeated in part because the enemy's psychology confounded their expectations. In selecting cases from the modern era, the editors display a strong American and European bias. The later chapters, at least, may fall into the very trap that the editors seem to advise against.

There is also a problem of terminology. Military professionals and defense specialists have spent much time defining strategy. No doubt this has been overdone. Doctrinal debates over the wording of a definition and its implications can be wasted efforts. The complexity of the subject is reflected in the difficulty of defining it precisely. But in a single work it is wise to be consistent, and this collection is not.

The authors argue that definitions of strategy are pointless, because "strategy is a process, a constant adaptation to shifting conditions and circumstances in a world where chance, uncertainty, and ambiguity dominate." Clausewitz is apparent throughout this collection, and the folly of a rigid system of definition and rule-making is well understood. Furthermore, defining strategy broadly is well suited to contributors whose purpose is to show how discreet factors—namely, geography, history, culture, economics, and governmental systems—have affected the strategic process.

But reading this book one is inclined to ask what is *not* strategy? War-making on a grand scale has become a national enterprise, drawing on all resources of the modern state. And is there a difference here between grand strategy, military strategy, and policy? The articles contradict each other. Admittedly, strategy and the making of strategy are very elusive concepts. The advantage of studying the makers of strategy is that by concentrating on individuals one has a clear focus and thus avoids the problem of trying to convince 19 strong-minded contributors to agree. Some of them comment on the five general factors, but many do not. The lack of a sense that the authors share a common view of what strategy is—or at least a general sense of what the strategic process is—undermines the focus of the volume.

The book is dedicated to those who died in Vietnam, "because their leaders had no patience with history or with the imponderables that are the stuff of history." Yet, little attention is given to the type of warfare that seems to be predominant today—limited regional conflict. What about the making of strategy in such cases? Is it really strategy? Or is strategy only made when all national resources are involved? Again, a clearer notion of what is meant by "making strategy" would be helpful.

Finally, the treatment of the period since 1945 is particularly unsatisfying as U.S. defense planners today try to project strategy into an uncertain future. There is no doubt that the Western world is in transition, and at such a time it is natural to look to the recent past.

1996 SYMPOSIA

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Colin Gray's sweeping generalizations about the United States during the Cold War are not always fulfilling. The thrust of his argument is that America is ignorant of strategy-making but has muddled through the Cold War surprisingly well. There are brilliant and provocative statements; however, the lack of historical documentation to back generalizations and the already dated nature of some assertions undermine the argument on many points.

Much of the discussion centers on nuclear strategy during the Cold War. Gray criticizes the American tendency to focus on apolitical solutions to nuclear problems, relying on the artificial catechism of deterrence to the detriment of understanding the political nature of strategy-making. Moreover the United States does not look beyond the near-term: "[T]he lack of foresight ingrained in culture and institutions can render even the idea of long-range planning mildly humorous." In the realm of the nuclear, he is to some degree correct; Americans are fascinated by technology and will approach the world with a problem-solving bias. It is, as he points out, part of our culture.

But there seems to be little understanding of the role of economic and domestic political factors. The problem-solving approach may be ahistorical and apolitical in some senses, but it is the only politically viable stance from a domestic viewpoint. This is not Great Britain. Gray's overarching argument—that U.S. civilian and military planners have no real understanding of strategy-making, yet that American grand strategy in the Cold War years was a resounding success—appears to be contradictory and ungenerous. And it is unhelpful to those of us who, by studying recent history, hope to glean new insights for fathoming the future.

This book has much to offer students of military history, comparative defense planning, and the evolution of strategy. The quality of the writing and scholarship is high, and it goes beyond the Earle and Paret volumes to cover new ground in a pioneering way. The volume easily makes the case that the process of making strategy is at least as important as those who make it. It therefore fulfills its purpose and is a valuable contribution to the field. There are inconsistencies, and the book provokes more questions than it answers, yet intelligent readers will find it engaging. The essays can be sampled like vintage port—individually savored even if not always complementary. There may be no easy answers; but there is much here to stimulate thought about past approaches and their relationships to current strategic dilemmas.

JFQ

A PRINCE OF A TALE

A Book Review by

PATRICK L. CLAWSON

**Desert Warrior:
A Personal View of the Gulf War by
the Joint Forces Commander**
by Khaled bin Sultan, with Patrick Seale
London: HarperCollins, 1995.
492 pp. \$35.00
[ISBN 0-06-017298-3]

The Saudi royal family is discreet to a fault. That makes the autobiography of Prince Khaled bin Sultan, senior Saudi commander during Operation Desert Storm, son of Saudi defense minister Prince Sultan, and nephew of King Fahd, all the more remarkable. He does little to mask his motive, which is to take issue with the account of the Persian Gulf War found in *It Doesn't Take a Hero* by Norman Schwarzkopf. When that book was published, Khaled challenged what he termed "slanted remarks" and "co-cocted" stories "distorted . . . to give [Schwarzkopf] all the credit for the victory over Iraq while running down just about everyone else."

To be blunt, in comparing these two "I like me" books, the Prince comes across as more of a gentleman (or should I say more of a prince?) than Schwarzkopf. Khaled did well to engage the services of Patrick Seale, a British journalist-cum-author with a deep knowledge of the Middle East and experience in doing difficult biographies (his work on Syria's President Hafez al-Asad is a classic). The criticism in *Desert Warrior* is in the archetypal British style, offered more in sorrow than anger. Instead of resentment of Schwarzkopf's condescension toward the poor performance of Saudi land forces and command structure, there are detailed accounts of points on which Khaled comes across better than his American counterpart.

Those points include one of the most important of the war: in retrospect,

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Khaled seems to have understood the nature of the Iraqi opposition force better than did the Americans. He did not have reams of intelligence or years of training, but he grasped certain fundamentals. In particular, as he stated at the time, the battle of al-Khafji on January 30-31 was a signal event. As Michael Gordon and Bernard Trainor saw it in *The Generals' War: The Inside Story of the Conflict in the Gulf* (reviewed in *JFQ*, Summer 1995), the battle revealed just how impotent Iraq was against the coalition forces. It provided evidence that the Iraqis were utterly incapable of fighting a modern war and were dispirited to the point of ineffectiveness. Thereafter, Khaled correctly predicted that the land war would be a cake walk.

If criticism of Schwarzkopf for overestimating the threat is one theme of



Desert Warrior, another is the cavalier approach used to end the war. Khaled's account of the March 3 meeting at Safwan with Iraqi Lieutenant General Sultan Hashim Ahmad has the ring of truth to it. According to Khaled, not much thought was given to the political impact of the meeting, and so major errors were made: Saddam Hussein and his top officials were able to avoid being seen conceding to the allies, no statement of surrender was required, not much was done for Kuwaiti POWs (whom Iraq might well have handed over if pressed), and the Iraqi side was able to preserve various privileges (such as helicopter flights) which were invaluable in maintaining Saddam's rule despite uprisings in March and April 1991. Khaled is wise not to claim that he spoke out against these mistakes. He portrays himself as troubled by the events but prepared to defer to the United States for the sake of allied unity and out of respect for its expertise. Perhaps. But it is also possi-

ble that Saudi leaders were just as unprepared as the Americans for an end to the war. Desert Storm was a spectacular achievement on many fronts, but it was not a shining example of how to carry out war termination.

Although the implicit criticisms of Schwarzkopf in the last third of *Desert Warrior* are well worth reading, the first two-thirds are thinner fare. Anyone looking for insight into how Saudi decision-making works will not find it here. And some sensitive issues are discussed in terms that do not jibe with what seasoned regional analysts would expect or what some journalists reported at the time. Specifically, Khaled would have us believe that his involvement in procurement from Saudi sources was motivated purely by the desire to ensure that deals were done at low cost to the Saudi exchequer, while other accounts attribute to him an interest in the distribution of the profits. According to *Financial Times* reporter Simon Henderson, Khaled "made far too much money from the war. Estimates vary from several hundred million dollars to up to \$7 billion, according to senior Western officials."

Despite its subtitle "A Personal View of the Gulf War," the first third of *Desert Warrior* is about the Prince's upbringing and life prior to Desert Storm. It is slow going. While involved in some fascinating events, he is not about to spill family or national secrets. In particular, he tells us little of what we would like to know about the deal for Chinese long-range missiles for which he was responsible (How was the United States kept in the dark? What kind of political discussions took place inside Saudi Arabia about pursuing this deal? What dialogue was there with the Chinese about the geostrategic implications of the deal?).

It is not surprising to find that a Saudi prince is guarded. Khaled comes from a culture in which knowledge is power and knowledge shared is power lost. The pleasure is to find how open he is about Desert Storm. And it is satisfying to find an Arab leader who offers a rather sobering analysis, without hyperbole, with only the normal level of bragging found in such accounts, and with scattered comments about shortcomings on his side. That Khaled and Schwarzkopf did not see eye to eye on every issue was predictable. Indeed, what is most striking about their respective accounts is how well the U.S. and Saudi sides worked together despite cultural differences. **JFQ**

THE MILITARY IN ISRAELI SOCIETY

A Book Review by

JOSEPH E. GOLDBERG

Civil-Military Relations in Israel

by Yehuda Ben Meir

New York: Columbia University Press, 1995.
235 pp. \$29.95
ISBN 0-231-09684-4]

The Military in the Service of Society and Democracy: The Challenge of the Dual-Role Military

edited by Daniella Ashkenazy
Westport, Connecticut: Greenwood Press, 1994.
229 pp. \$55.00
[ISBN 0-313-29004-0]

Democratic governments, ever fearful of losing their freedoms, have held to the principle of civilian supremacy over the military. *The Federalist Papers* articulated the Founders' suspicion of standing armies and defended the Constitution against the accusation that it provided insufficient safeguards against the military's encroachment into civilian affairs.

Two recent publications on Israeli civil-military relations help us to better understand this relationship in democracies in general and Israel specifically. *Civil-Military Relations in Israel* by Yehuda Ben Meir and *The Military in the Service of Society and Democracy*, an anthology edited by Daniella Ashkenazy, each make a valuable contribution to the growing body of literature on the Israel Defense Forces (IDF).

Since independence Israel has found itself in a constant state of hostilities. Not counting the Scud missile attacks during the Persian Gulf War, Israel has been at war five times since 1948. It has also been constantly threatened by terrorist acts. The contribution of the military to Israel's survival is therefore greatly appreciated and, as Avraham Carmeli's chapter in *The Military in the Service of Society and Democracy* points out, inductees into the Israeli army hold the IDF in high esteem and see military service as contributing to their personal growth as well as national security. Ashkenazy's book

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arose from a seminar on the "Army in the Service of Society and Democracy" sponsored by the Konrad Adenauer Foundation in Israel. Over half of the book examines the role of the IDF in Israeli society, including an excellent chapter on civilian control by Moshe Lissak. Because the military has played a significant part in integrating a heterogeneous Jewish population into Israeli society through its educational function, the IDF has contributed to the growth of the state beyond its obvious security accomplishments. In addition, the book devotes chapters to civil-military relations in the United States, Singapore, France, Britain, Yugoslavia, and Germany.

The volume by Yehuda Ben Meir begins with two fine chapters on civil-military relations. He emphasizes that a complete separation of these two sectors of society would be as unwise as it would be impractical to achieve. The civil sector must grasp the realities of the assets, both human and material, that are available to pursue their strategic objectives while the military must be aware of political objectives. The danger, he believes, stems less from a military takeover than from civil authorities simply deferring to the military in formulating ends as well as means. Military solutions are not always the best course of action. This danger becomes acute, of course, in times of crisis.

Ben Meir offers a model of civil-military relations that divides policy concerns into political affairs, domestic matters, national security, and the armed forces. Whereas civilian involvement is justified in all these areas, military activity in the political and electoral processes is prohibited. His discussion of policy and the existing literature is illuminating and is a contribution in its own right.

Civil-Military Relations in Israel frankly discusses past IDF involvement in critical issues. But despite this involvement, the Israeli state has ensured that military participation is depoliticized. In part, Ben Meir traces this tradition to a heritage which has nurtured belief in liberty and warned Israelis of the dangers of militarism. But he also acknowledges the unique contribution to civilian control by the country's first prime minister and defense minister, David Ben Gurion.

Clausewitz's dictum that strategy exists to fulfill political ends is quoted so frequently that we forget that not only do military ends serve as a means to accomplish political objectives, but that political objectives also must take strategic capabilities into account. Both books reviewed open us to a number of dimensions of civil-military relations on which we should all reflect.





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JFQ
JOINT FORCE QUARTERLY

Published for the
Chairman of the Joint Chiefs of Staff
by the Institute for National Strategic Studies
National Defense University
Washington, D.C.